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**SITE INSPECTION
REPORT**

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Simmons Casket Company
Lancaster, Garrard County, Kentucky

EPA ID N° KYD050074889

WasteLAN N° 01994

Prepared under
EPA Contract N° 68-W9-0055

Prepared for
WASTE MANAGEMENT DIVISION
U.S. Environmental Protection Agency

Prepared by
B&V Waste Science and Technology Corp
BVWST Project N° 52011.020

October 30, 1992

Prepared by



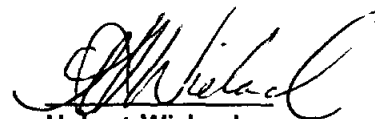
Carter J. Helm
Site Manager

Reviewed by:



Scotti Thomas
Technical Reviewer

Approved by:



Hubert Wieland
Project Manager

**FINAL
Site Inspection Report
SIMMONS CASKET COMPANY
Lancaster, Garrard County, Kentucky**

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EXECUTIVE SUMMARY

The Simmons Casket Company facility was a casket manufacturer from 1965 to 1984 and was operated by three different casket companies. The 49 acre facility is located 0.4 mile south of Lancaster in Garrard County, Kentucky. Since 1987, Allison Abrasives, Inc. has been the occupant of the facility manufacturing abrasive wheels.

The site consists of a 100,000 square foot manufacturing plant, a large warehouse, a waste compactor, a dust collection system, a concrete drum storage pad, and a large mound of soil, wood and concrete debris. The area around the southeast portion of the property is where hazardous waste handling occurred. This area contains the drum storage pad in addition to areas of stained soil and vegetative stress.

Ten environmental samples were collected at the Simmons Casket Company facility. Analytical data obtained from the Contract Laboratory Program indicates an area of contaminated soil. The analytical results imply that most of the contamination found in surficial soils and sediment samples are attributable to past activities and operations of casket manufacturing. Contaminants include: phenol, benzyl butyl phthalate, PCB-1260, and copper.

The Simmons Casket Company is located in the Nonglaciaded Central Groundwater Region as well as Kentucky's Blue Grass Physiographic Province. Formations beneath the site are predominately limestone, however, karst topography is not a concern in this area. The groundwater pathway is not a concern due to the poor quality of the local groundwater, i.e., high salinity and high hydrogen sulfide concentrations. Three municipal water systems which obtain their water supply from a surface water intake in the Kentucky River serve the area, otherwise, residents use cisterns for potable water.

The surface water pathway is of minimal concern. The only surface water intake utilized is not within the 15-mile pathway, and the only targets of importance are recreational swimming, fishing, and two threatened aquatic species.

The air and soil pathways are of small concern due to the small target population of the Lancaster area.

Based on the analysis of possible migration pathways, the results of the sampling investigation, and the information obtained from reference material, it is recommended that no further remedial action be planned for Simmons Casket Company.

FINAL
Site Inspection Report
SIMMONS CASKET COMPANY
Lancaster, Garrard County, Kentucky

EPA ID # KYD050074889
WasteLAN # 01994

1.0 Introduction

Under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the U. S. Environmental Protection Agency (EPA), Waste Management Division, Region IV conducted a site inspection (SI) at the Simmons Casket Company in Garrard County, Kentucky. The purpose of this investigation was to collect information concerning conditions at the site sufficient to assess the threat posed to human health and the environment and to determine the need for additional investigation under CERCLA/SARA or other authority. This investigation included reviewing previous file information, sampling of waste and environmental media to test preliminary assessment (PA) hypotheses and document HRS factor values and scores, collecting additional non-sampling information, and interviewing nearby residents.

The objectives of this inspection were to determine the nature of contaminants present at the site and to determine if a release of these substances has occurred or may occur. Further, this inspection sought to determine the possible pathways by which contamination could migrate from the site and the populations and environments it would potentially affect. Through these objectives, a recommendation was made regarding future activities at the site.

The completion of specific tasks concerning the Simmons Casket Company site had helped achieve the objectives of the site inspection. One task included obtaining and reviewing relevant background materials. These materials originated from the State of Kentucky's, Division of Waste Management, U.S. EPA files, and documents provided by the Plant Manager of Allison Abrasives (current facility occupant), Lynn Osborne. Information on the local water systems were obtained during the site visit. Such factors as: water source, number of connections per system, and water line distribution were also documented. A local well survey was completed to determine the location and distance to the nearest well. Potentially affected populations and

environments associated with the groundwater, surface water, air and soil pathways were evaluated. An accurate site sketch was completed as well as the collection of environmental samples.

2.0 Site Description

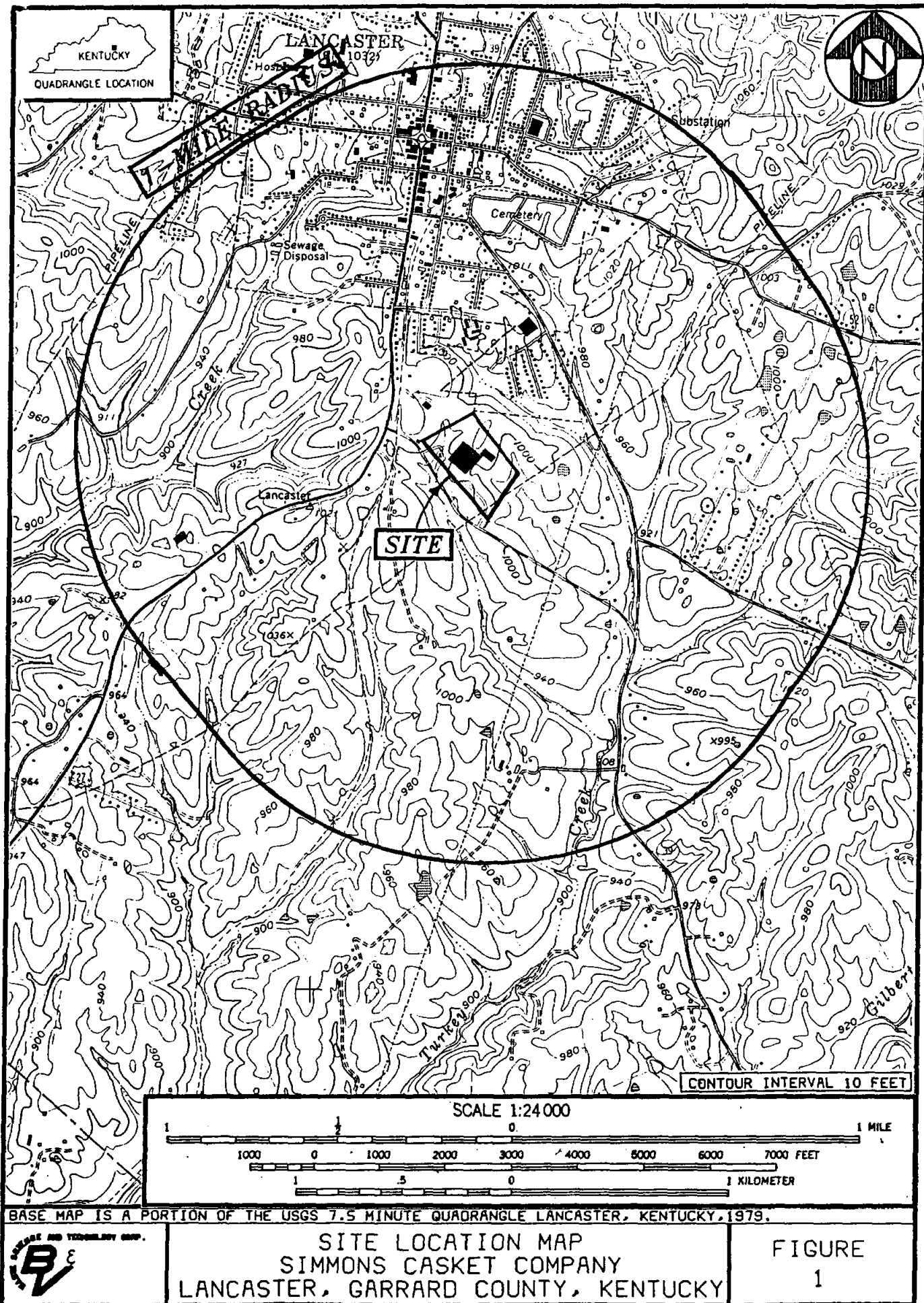
2.1 Location

The Simmons Casket facility is located at 163 Industry Road (Highway 29 South) approximately 0.7 miles south of Lancaster, the county seat of Garrard County. The geographic coordinates of the facility are 37° 36' 21" N latitude and 84° 34' 35" W longitude (Appendix A). The facility is situated in rural central Kentucky, 11 miles east of Danville, Kentucky (Appendix A). The site location is presented in Figure 1. Climate in the area is variable with cold, dry, windy winters and hot, humid, sultry summers. Precipitation is moderate to high during all seasons (Ref. 1). The mean annual precipitation is 48 inches, and the mean annual lake pan evaporation is 35 inches, resulting in a net annual rainfall of 13 inches (Ref. 2, pp. 43, 63). The 2-year, 24-hour rainfall is 3.0 inches (Ref. 3, p. 95). Typical elevations within the four mile radius area are 780 feet to 1100 feet above mean sea level (amsl) whereas, Simmons Casket Company lies between 980 to 1020 feet amsl (Appendix A).

2.2 Site Description

The total area of the site property is approximately 49 acres, of which the factory itself contains 100,000 square feet (Ref. 4). The facility began casket manufacturing in 1965 and continued until 1984. The site was inactive for 2 years, then in the fall of 1987, Allison Abrasives, Inc. began abrasive wheel manufacturing which is the current activity at the plant (Ref. 5). Directly across from the facility, on the south side of Industry Road (Highway 29 South), lies the Garrard County Fire District, Station N^o 1; otherwise neighbors of the facility are private homes or farms. The site is located in a rural area with some small shops and restaurants located 1.0 mile north in the downtown Lancaster area (Ref. 4, Appendix A).

The manufacturing plant (which encompasses approximately 2 acres) is surrounded by an employee parking area along the southwest edge. Truck loading docks and driveways occupy the northeast edge of the main building. To the north stands a water tower which is only used for onsite fire prevention (Ref. 4). An empty, locked warehouse exists on the east corner of site property. Hazardous waste handling and



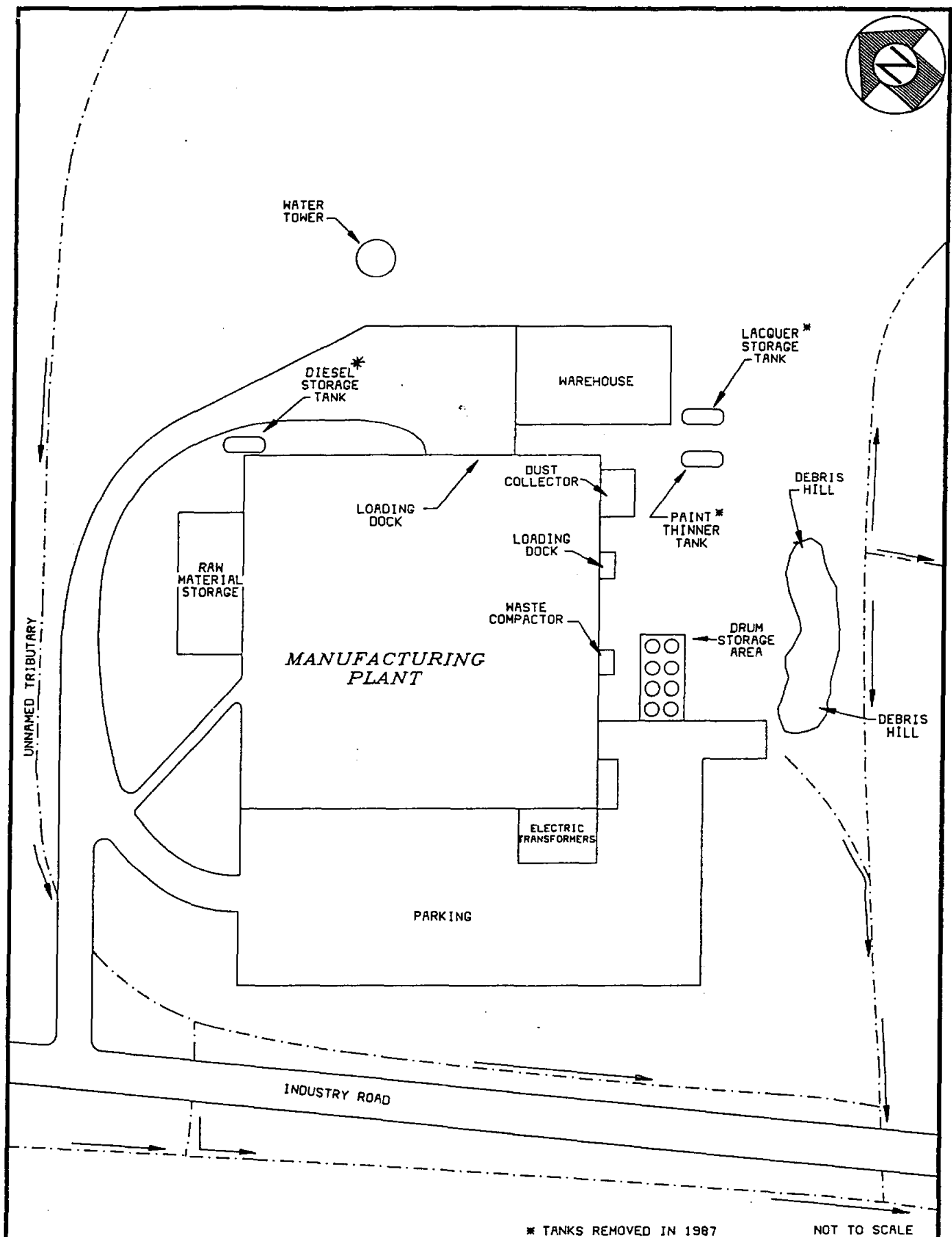
storage occurred along the southeast edge of the factory during the 15 years of casket manufacturing. Allison Abrasives also uses the southeast area for some waste handling and transporting. A Kentucky Department of Waste Management Trip Report (October 1989) cites stained soil and leaking drums and the BVWST site inspection during which circular rings of debris were observed on the concrete drum pad; obvious signs of recent drum removal (Refs. 4, 6). Some of the areas of interest along the southeast portion of the facility include: a large dust collection system, an old loading dock, a waste compactor, a 25 x 50 foot concrete drum storage pad, a large mound of soil, concrete and wood debris, and a few areas of stained soil (Ref. 4). Vegetative stress has also been observed in areas within the southeastern portion of the facility's property (Ref. 4). The site layout is illustrated on Figure 2.

The property surrounding Allison Abrasives, Inc. is not fenced or guarded allowing easy access to the employees as well as the public (Ref. 4).

2.3 Operational History and Waste Characteristics

In 1965, casket production was initiated by the National Casket Company, a division of Walco National Corporation (Ref. 5). In the fall of 1980, Simmons Casket Company, which is a division of G&W Casket Company (Gulf and Western Company), took over operations. After two years of manufacturing, York Casket Company continued operations from the fall of 1982 until late 1984. The plant was purchased by Allison Abrasives, Inc. in 1986 (Refs. 4, 5). In August 1987, Allison Abrasives removed three underground storage tanks at the facility. This tank removal was part of the restoration that occurred between 1986 and October 1987, which marks the beginning of abrasive wheel production for the facility's current occupant (Ref. 4). The casket companies used the underground storage tanks for diesel fuel, paint thinner, and lacquer (Ref. 4, 5).

The manufacturing process that was utilized by the casket companies consisted of welding/constructing of casket "shells," 3 stages of washing, and finally, painting and lacquering of the caskets (Ref. 5). A couple of vats were used inside for paint stripping and varnishing. These vats were refilled with products from the underground storage tanks (Refs. 4, 5). Paint sludges were the major by-product from the manufacturing operation; other wastes include paper, wood and solvents (Ref. 7). Paint sludges were compacted with non-hazardous wastes and hauled off-site to the county landfill (Ref. 7). Toluene was also hauled off-site but by a proper hazardous waste transporter and disposer (Ref. 8). In late 1979, the paint sludge required



SITE LAYOUT MAP
SIMMONS CASKET COMPANY
LANCASTER, GARRARD COUNTY, KENTUCKY

FIGURE
2

analysis before deposition into the county landfill to satisfy Kentucky Division of Hazardous Material and Waste Management (KHDM) requirements. Initial analysis indicated high lead concentrations which prompted KDHM to withdraw permission to use the county landfill (Ref. 9). After a month of debate and more analyses, the KDHM granted permission to use the landfill for their paint sludges contingent upon quarterly leach tests to monitor lead concentrations (Ref. 10).

In May of 1981, Simmons Casket Company filed EPA documentation for "Notification of Hazardous Waste Site" which clearly defined their manufacturing waste byproducts as paint thinner waste and paint sludges (Ref. 11). In May of 1982, Simmons Casket was inspected by KDHM and several non-compliances were noted such as no drum labels, no weekly log, no facility contingency plan, and 1,1,1-trichloroethane present onsite but not registered (Ref. 12).

On September 23, 1982, the U. S. Environmental Protection Agency withdrew Simmon's RCRA Part A application and terminated their interim status as a storage facility- providing they remove their hazardous waste within a 90 day time limit (Ref. 13). During a March 1983 inspection, the KDHM cited the York Casket Company for wastes that had been stored for more than 90 days (Ref. 14). York Casket Company's solvent wastes were properly transported to Reclaimed Energy, Inc. in Connersville, Indiana, and their paint sludge was disposed of in the permitted county landfill (Ref. 15). After York Casket closed, full drums remained on site property. KDHM pursued York's parent company, Halmark Casket Company until proper disposal was implemented. In July, 1985, the generator status of the site was "closed" (Ref. 16).

In March 1989, Allison Abrasives applied to KDHM to accept an additional waste stream (cured abrasive grain dust from dust collectors) with an annual production rate of 1500 cubic yards (Ref. 17). In October 1989, the KDHM completed a preliminary assessment site visit during which leaking drums and stained soil were discovered along the east side of the building (Ref. 6). A KDHM preliminary assessment was completed in October 1990 in which the state recommended a high priority Site Investigation (Ref. 5).

3.0 Field Investigation

3.1 Sample Collection

During the field investigation, conducted the week of February 25, 1992, B&V Waste Science and Technology Corp. Attempted to identify and characterize contaminants which may be present in the environment as a result of activities that were conducted at the Simmons Casket Company. To accomplish this, BVWST collected environmental sediment and surface soil samples from a number of strategic locations. These locations were selected based on historical information, hydrogeological data for the region and site area, and direct observation at the site.

3.1.1 Sample Collection Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this inspection were in accordance with the standard operating procedures as specified in Section 3 and 4 of the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual, United States Environmental Protection Agency, Region IV, Environmental Services Division, February 1, 1991, and with the Field Study Plan prepared by BVWST February 13, 1991; deviations from the study plan include the following:

1. No subsurface soil or temporary well samples were collected due to auger refusal at 4 feet below land surface (bls).
2. Background soil samples were moved to the northwestern corner of the site. This portion of site property is located at a higher elevation and appeared to be upgradient from other sample stations.
3. Surface soil samples were moved to different locations based on field observations.
4. Two sediment samples were added to help delineate potential overland contaminant migration across the eastern portion of site property.

3.1.2 Duplicate Samples

Duplicate samples were offered to and accepted by Mohammad Mohammadi of GeoSciences, Inc., designated consultant for Allison Abrasives (current owner of the Simmons Casket Property). Receipt for sample forms are on file at BVWST.

3.1.3 Description of Samples and Sample Locations

During the sampling investigation, a total of 10 environmental samples were collected. All sample locations are shown in Figure 3. Samples were collected from surface soils and from sediment in obvious drainage areas around the site. Sample codes, descriptions, locations, and rationale are contained in Table 1.

3.1.4 Field Measurements

No field measurements were performed on the soil samples collected during this investigation.

3.2 Sample Analysis

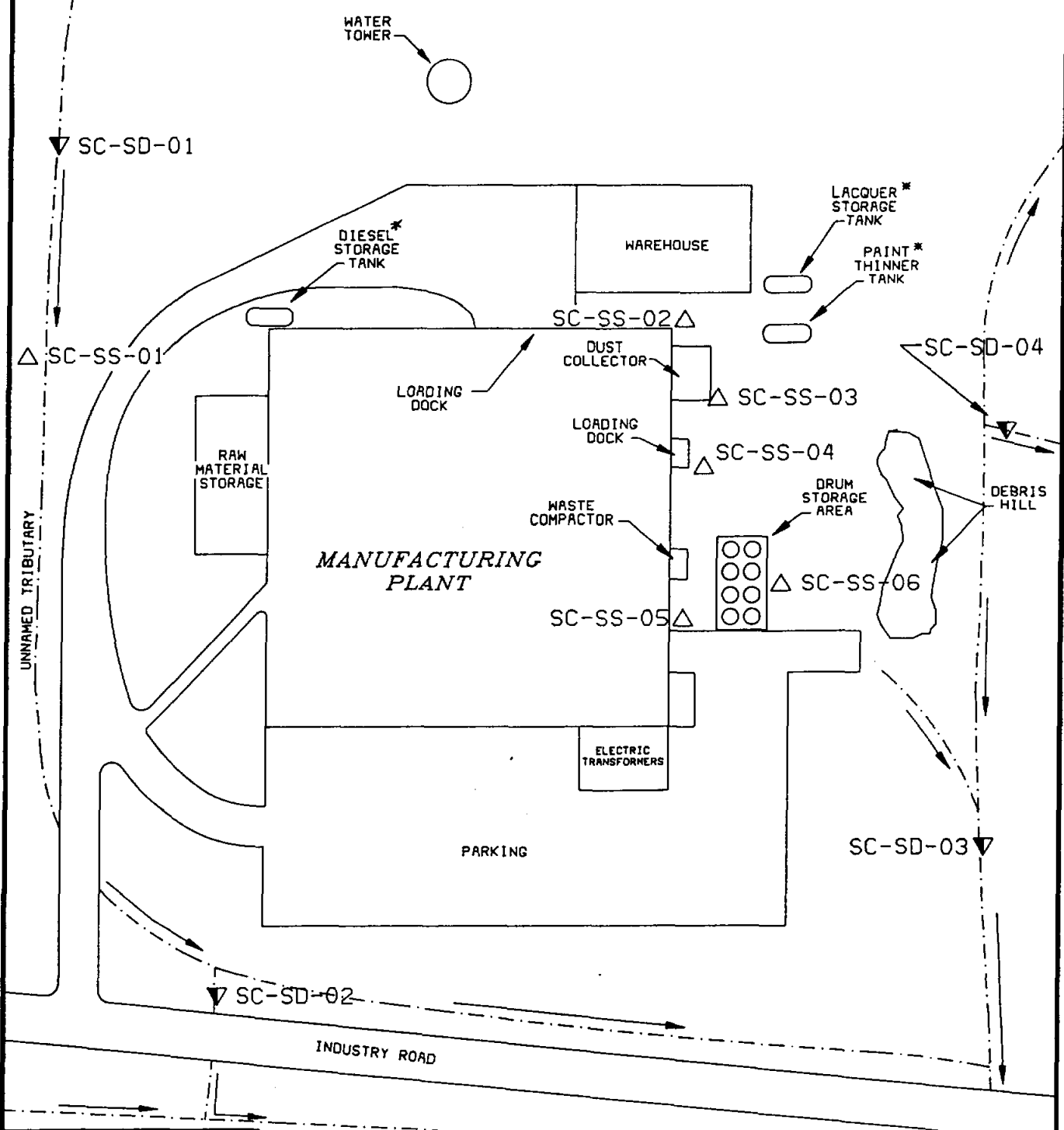
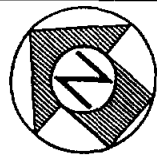
3.2.1 Analytical Support and Methodology

All samples collected were analyzed under the Contract Laboratory Program (CLP) and analyzed for all parameters listed in Target Compound List (TCL), and the Target Analyte List (TAL). Organic analysis of soil and sediment samples was performed by Ecotek Laboratory Services of Atlanta, Georgia. Inorganic analysis of soil and sediment samples was performed by Skinner Labs of Walton, Massachusetts.

All laboratory analyses and laboratory quality assurance procedures used during the investigation were in accordance with standard procedures and protocols as specified in the Laboratory Operations and Quality Control Manual, United States Environmental Protection Agency standard procedures and protocols for the Contract Laboratory Program (CLP) Statement of Work (SOW), as applicable.

3.2.2 Analytical Data Quality and Data Qualifiers

All analytical data were subjected to a quality assurance review as described in the EPA Environmental Services Division laboratory data evaluation guidelines. In the tables, some of the concentrations of the organic and inorganic parameters have been qualified with a "J". This indicates that the qualitative analysis was acceptable, but the quantitative value has been estimated. A few other compounds are qualified with an "N", indicating that they were detected based only on the presumptive evidence of their presence. This means that the compound was tentatively identified, and its detection cannot be used as a positive indication of its presence. Results for some background samples are reported with a "U" qualifier. This qualifier means that the material was analyzed for but not detected. The reported number is the laboratory-derived minimum quantitation limit (MQL) for the compound or element in that



LEGEND

- △ SURFACE SOIL
- ▽ SEDIMENT

* TANKS REMOVED IN 1987

NOT TO SCALE



SAMPLE LOCATION MAP
SIMMONS CASKET COMPANY
LANCASTER, GARRARD COUNTY, KENTUCKY

FIGURE
3

Table 1
Sample Locations and Rationale
Simmons Casket Company
Lancaster, Garrard County, Kentucky

Sample Code	Sample Type	Location	Depth	Rationale
SC-SS-01	Surface Soil	North corner of property	6 in.	To establish background levels.
SC-SS-02	Surface Soil	East corner of building	4 in.	To determine the absence or presence of contaminants.
SC-SS-03	Surface Soil	South corner of dust collection system	4 in.	To determine the absence or presence of contaminants.
SC-SS-04	Surface Soil	Near loading dock on southeast side of building	3 in.	To determine the absence or presence of contaminants.
SC-SS-05	Surface Soil	From stained soil between waste compactor and drum storage area.	4 in.	To determine the absence or presence of contaminants.
SC-SS-06	Surface Soil	Southeast side of the drum storage area from stained soil	2 in.	To determine the absence or presence of contaminants.
SC-SD-01	Sediment	North corner of property, upgradient location in unnamed intermittent stream	0-2 in.	To establish background levels.
SC-SD-02	Sediment	In drainage ditch west of the facility, as runoff exists property	0-2 in.	to determine the absence or presence of contaminants
SC-SD-03	Sediment	In unnamed intermittent stream, south of the facility, just below the drum storage area.	0-2 in.	to determine the absence or presence of contaminants.
SC-SD-04	Sediment	In drainage ditch east of debris hill	0-2 in.	to determine the absence or presence of contaminants.

sample. At times, miscellaneous organic compounds that do not appear on the target compound list are reported with the data set. These compounds are qualified as "JN", indicating that they are tentatively identified at estimated quantities. Because these compounds are not routinely analyzed for or reported, background levels or MQL levels are not generally available for comparison. An excessive extraction holding time was noted for all extractable analyses in this sampling event, and analytical results are presented as estimated values.

4.0 Source Sampling

4.1 Sampling Locations

The source type at Simmons Casket Company is contaminated soil. During the sampling investigation it was noted that areas along the northeast to southeast side of the manufacturing plant were vegetatively stressed usually coinciding with areas of stained soil (Ref. 4, Appendix C). Shared contaminants that were detected in surface soil samples were utilized to outline the area affected by contaminated soil (Appendix B). Samples SC-SS-02, SC-SS-03, SC-SS-04 and SC-SS-05 were plotted to determine the waste source area of 5,000 square feet (Figure 3). Differences in elevation of the source area is minimal since it does not include the hill of debris (Appendix B). There exists no containment for the contaminated soil (Ref. 4). A discussion of soil pathway targets is contained in Section 7.0.

4.2 Analytical Results

Results of organic and inorganic sampling are presented in Tables 2 and 3. Sample SC-SS-01 is designated as the background sample for the surface soil media. Values for background sample results are presented either as a measured value or as the minimum quantitation limit (MQL). Samples containing concentrations of contaminants greater than three times the background level, or equal to or greater than the MQL of these contaminants are considered to be elevated. These samples are shaded on the tables and noted in the text.

4.2.1 Organic Analytical Results

Sample SC-SS-02, collected near the warehouse and the dust collector, contained an estimated 5300 ug/kg of phenol (12 times MQL) and an estimated 3700 ug/kg of pyrene (8 times MQL). This sample also contained 24,000 ug/kg of PCB-1260 (533 times MQL). Phenol was also elevated in sample SC-SS-04, taken near the loading

TABLE 2
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
SIMMONS CASKET COMPANY
LANCASTER, GARRARD COUNTY, KENTUCKY

PARAMETERS (UG/KG)	Background	ONSITE				
	SC-SS-01	SC-SS-02	SC-SS-03	SC-SS-04	SC-SS-05	SC-SS-06
MISCELLANEOUS PURGEABLES						
DIMETHYLCYCLOHEXANE						7JN
DIMETHYLHEPTANE						8JN
UNDECANE						40JN
DIMETHYLOCTANE						30JN
DIMETHYLOCTADECANE						50JN
UNIDENTIFIED COMPOUNDS / NO.						100J/5
EXTRACTABLES						
PHENOL	440UJ	5300J	980J	1400J	3200J	—
2-METHYLPHENOL	440UJ	60J	—	—	51J	—
(3-AND/OR 4-) METHYLPHENOL	440UJ	66J	—	—	49J	—
PENTACHLOROPHENOL	1100UJ	380J	—	—	—	—
PHENANTHRENE	440UJ	83J	—	—	—	—
DI-N-BUTYLPHTHALATE	440UJ	610J	—	—	—	—
FLUORANTHENE	440UJ	670J	—	—	—	—
PYRENE	440UJ	3700J	—	—	—	—
BENZYL BUTYL PHTHALATE	440UJ	—	—	500J	1100J	—
3,3'-DICHLOROBENZIDINE	440UJ	540J	—	—	—	—
BENZO(A) ANTHRACENE	440UJ	730J	—	—	—	—
BIS(2-ETHYLHEXYL) PHTHALATE	440UJ	—	—	560J	—	—
DI-N-OCTYLPHTHALATE	440UJ	1200J	—	—	—	—
MISCELLANEOUS EXTRACTABLES						
HYDROXYBENZALDEHYDE (2 ISOMERS)		1000JN	400JN	1000JN		
HYDROXYBENZONITRILE		100JN				
METHYLENEBISPHENOL/ ISOMERS		6000JN/3	2000JN/2	10000JN/2		
HYDROXYBENZENEMETHANOL				200JN		
HYDROXYBENZENEACETIC ACID				90JN		
PHTHALIC ANHYDRIDE					80JN	
BIS(DIMETHYLETHYL)CYCLOHEXADIENEDIONE					300JN	2000JN
PETROLEUM PRODUCT						N
UNIDENTIFIED COMPOUNDS / NO.		3000J/3				20000J/12
PCB'S						
PCB-1260 (AROCLOR-1260)	45U	24000	80	—	—	—

— Material analyzed for but not detected above minimum quantitation limit.

U Material analyzed for but not detected above minimum quantitation limit.

The value is the minimum quantitation limit for the sample.

J Estimated value

N Presumptive evidence of presence of material

TABLE 3

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
SIMMONS CASKET COMPANY
LANCASTER, GARRARD COUNTY, KENTUCKY

Parameters (mg/kg)	Background	ONSITE				
	SC-SS-01	SC-SS-02	SC-SS-03	SC-SS-04	SC-SS-05	SC-SS-06
ALUMINUM	16000	19000	22000	6800	10000	11000
ARSENIC	11	35	20	6.6	6.1	6.6
BARIUM	220	170	160	100	61	64
BERYLLIUM	1.5	2.2	1.1	0.55J	0.82	0.92
CADMIUM	2UJ	1.5J	—	—	—	—
CALCIUM	20000J	12000J	11000J	150000J	96000J	29000J
CHROMIUM	26	24	19	20	13	16
COBALT	19	13	14	7.2	10	18
COPPER	14J	150J	16J	100J	35J	28J
IRON	43000	39000	49000	15000	20000	23000
LEAD	55J	160J	27J	54J	26J	43J
MAGNESIUM	6800J	3900J	3700J	27000J	14000J	9800J
MANGANESE	1400J	690J	1700J	480J	730J	1600J
NICKEL	16	29	18	11	11	12
POTASSIUM	940	2700	1500	1100	900	740
SODIUM	58	380	480	400	120	70
VANADIUM	33	23	31	—	17	23
ZINC	53J	290J	73J	110J	45J	36J

— Material analyzed for but not detected above minimum quantitation limit.

U Material analyzed for but not detected above minimum quantitation limit.

The value is the minimum quantitation limit for the sample.

J Estimated value

dock (estimated 1400 ug/kg 3 times MQL). Also containing phenol was SC-SS-05, which was collected from an area of stained soil near the building. The concentration of phenol in this sample was estimated at 3200 ug/kg (7 times MQL). Various miscellaneous purgeables and extractables were also detected in surface soil samples (Table 2).

4.2.2 Inorganic Analytical Results

Arsenic was detected in SC-SS-02 at 35 mg/kg (3 times background). Calcium was found at elevated levels in samples SC-SS-04 and SC-SS-05. Sample SC-SS-02 also contained copper (estimated 150 mg/kg, 10 times background) and zinc (estimated 290 mg/kg, 5 times background). Sample SC-SS-04 also contained copper (estimated 100 mg/kg, 7 times background) and magnesium (estimated 27,000 mg/kg, 4 times background). Sodium was elevated in samples SC-SS-02, SC-SS-03, and SC-SS-04 (Table 3).

4.3 Conclusions

Contaminated soil was found at the Simmons Casket Company site, and several contaminants directly attributable to Simmons' operations were detected. These include phenol and copper. Also of note is the sharply elevated concentration of PCB-1260 at location SS-02. As this sample is located near the plant building and the warehouse, it is possible that a spill occurred in the immediate area, leading to the high concentration of PCB in only one area sampled on the property. The source of the polyaromatic hydrocarbons is estimated to be the paint thinners and lacquers used by the casket manufacturers.

5.0 Groundwater Pathway

5.1 Regional Hydrogeology

Simmons Casket Company is situated in the Nonglaciaded Central Groundwater Region as well as Kentucky's Blue Grass Physiographic Region (Refs. 18, pp. 228, 229; 19, pp. 1, 2). The region is characterized by thin regolith over sedimentary rock with meandering, highly dissecting streams and rivers (Ref. 18, p. 229; 19, p. 5, Appendix A). The physiographic subdivision that Simmons Casket lies in is the Outer Blue Grass which is typified by chiefly limestone with considerable interbedded shale (Ref. 19, p. 5).

The soil beneath the facility is of the Lowell Association, more specifically, the soil type is the Nicholson silt loam (Refs. 1, 20). The silt loam is characterized by: 2 to 6 percent slopes, 2 to 3 foot depths, high acidity, poor drainage, good tilth, and high erodibility (Refs. 1, 20).

Beneath the soil lies approximately 120 to 135 feet of the Ashlock Formation (Ref. 21). Members that comprise this formation include: the Reba, the Terrill, the Stingy Creek, the Gilbert and the Tate (Ref. 21). The Ashlock Formation contains alternating layers of fossiliferous limestone and dolomitic and calcitic mudstone. Beneath the Ashlock lies the Calloway Creek Limestone which ranges in thickness between 75 and 105 feet (Ref. 21). The Calloway Creek Limestone contains about 75 percent limestone in addition to shale and siltstone. Whole and fragmented fossils are common throughout this unit (Ref. 21). Below the Calloway Creek Limestone lies the Garrard Siltstone with an approximate thickness of 30 to 50 feet (Ref. 21). Siltstone represents about 85 percent of the Garrard unit with shale and limestone as additional constituents. The Clay's Ferry Formation lies beneath the Garrard Siltstone and is composed mostly of limestone. All of the above mentioned units are Upper Ordovician in age (Ref. 21). Although the majority of these formations are composed of limestone, karst topography is not a prominent characteristic of the area. The shale layers impede circulation of groundwater and prevent the development of openings by solution within most thick limestone beds; however, fractures and bedding-plane openings may be enlarged (Ref. 22, sheet 3). Faults have been mapped approximately ½ mile north and ½ mile south of the site (Ref. 21). Small sinkholes are fairly common in the outer Blue Grass area but drainage is surficial and does not occur through solution cavities (Ref. 19, p. 5). The Karst Hazard Assessment Map of Kentucky classifies the site area as lying the "lowest risk" carbonate area with less than 1 percent sinkhole perforation (Ref. 23).

Groundwater occurs in the sand and gravel in large river valleys and within the consolidated bedrock that underlies the entire region (Ref. 19, p. 20). Groundwater may also exist in the regolith as well (Ref. 18., pp. 229, 230). Regolith is the mechanical and chemical breakdown of the bedrock and occurs above the Ashlock Formation. Fractures, pore spaces, and bedding planes are the principal water-bearing openings. The fine-grained limestone, mudstone, siltstone, and shale that exist beneath the site has small, poorly connected openings which result in slow groundwater circulation and poor groundwater availability (Refs. 18, p. 230, 22, sheet 3). Well yields in valley bottoms and along streams in upland areas have been noted

to produce 100 to 500 gallons per day (gpd) (Ref. 22, sheet 3). However, drilled wells in the facility's area will not produce enough water for a dependable domestic supply (Ref. 22, sheet 2). A 49 foot deep well located 1.5 mile southeast of Simmon's Casket Company has been classified as containing "salty and sulfurous" water; sodium chloride and hydrogen sulfide are in readily detectable amounts (Ref. 22, sheet 2). Estimated depth to the water table is approximately 30 to 40 feet based upon topographic analysis; groundwater flow direction is estimated to be in a southwestern direction (Appendix A).

Typical hydraulic conductivity values of the consolidated mudstone, limestone and siltstone beneath the facility range from 1.0×10^{-4} cm/sec to 1.0×10^{-3} cm/sec (Ref. 24, p. 29).

5.2 Groundwater Targets

Residents within a 4 mile radius of Simmons Casket Company do not utilize groundwater for potable use. The majority of residents rely on one of three municipal systems: Lancaster Water Works, Crab Orchard Water District, or Garrard County Water Association (Ref. 4). Both Crab Orchard and Garrard County purchase their water supply from Lancaster Water Works, and Lancaster Water Works utilizes a single surface water intake located in the Kentucky River near the junction of Sugar Creek approximately 10 miles north of Simmons (Ref. 4). Those residents that do not have access to a municipal system typically rely on private cisterns rather than private wells to provide potable water (Ref. 4).

5.3 Sample Locations

No groundwater samples were taken due to the inability to reach the water table. Additionally, no private wells were located in the vicinity.

5.4 Groundwater Conclusions

The groundwater pathway is of minimal concern at Simmons Casket Company. Groundwater within the 4 mile radius area is not utilized for potable use.

6.0 Surface Water Pathway

6.1 Hydrologic Setting

Two unnamed intermittent drainage streams lie parallel to each other and are located on the east and west sides of the manufacturing plant. These drainage ditches eventually join and flow parallel to Industry Road. All overland flow exits the property via these intermittent streams. The overland flow segment across the facility is approximately 0.3 mile (Ref. 4, Appendix A). After 1.1 mile of southeast flow, the stream joins Turkey Creek and flows southwesterly for 2.9 miles until it junctions with Gilberts Creek. Gilberts Creek travels west for 1.4 miles and then terminates into the northern flowing Dix River within which the surface water pathway ends (Appendix A). An estimated 30 acres of facility property is drained by overland runoff (Ref. 4). Simmons Casket Company is located within the 100 year flood plain (Ref. 1). The reported 1991 average annual flow rate for the Dix River was 639 cfs, the Gilbert and Turkey Creeks, under 100 cfs (Ref. 25).

6.2 Surface Water Targets

All municipal systems retrieve their water from a Kentucky River surface water intake near the adjoining Sugar Creek located 10 miles north of the facility, many miles beyond the end of the site's surface water pathway (Ref. 4, Appendix A). The intake pumps water to two distribution centers in Lancaster. At the Lancaster city limits, "master meters" located at each road leading out of the city measure the amount of water that Garrard County and Crab Orchard municipal systems utilize (Ref. 25). Connections that utilize the Kentucky River surface water intake are: 1500 by Lancaster Water Works, 2200 by Garrard County Water Association, and 700 by Crab Orchard Water District, a total of 4400 connections or approximately 11,396 people (Refs. 26, 27).

Endangered or threatened species that lie along the surface water pathway include the federally and state threatened salamander mussel (*Simpsonaias ambigua*) (Ref. 28). Also found is the special state concerned fish, the northern madtom (*Noturus stigmus*) located within the Dix River (Ref. 28).

The Dix River is used for recreational swimming and recreational fishing (Ref. 29). Turkey Creek and Gilberts Creek have been utilized for recreational fishing; however, no commercial fisheries exist in the area (Ref. 29). Typical species found throughout

the surface water pathway include: shiners, bluegill, large mouth bass, white bass, channel catfish, brown and rainbow trout (Ref. 29).

6.3 Sampling Locations

The facility is surrounded along three sides by intermittent drainage ditches and streams which drain the entire facility property. These streams exit the property in three different locations all of which were sampled to determine if any contaminant migration is occurring via the surface water pathway. Sediment sample SD-01 is a background sample located in the northern corner of the site. Sample SD-02 is located at an exit point in the western corner just before the stream crosses under Industry Road. The SD-02 sample delineates site property that lies north and west of the manufacturing plant. Sediment sample SD-04 is representative of drainage flow originating from northeast area of the main plant, as well as runoff from the hill of debris. Sediment sample SD-03 was collected before exiting site property located in the southern corner of the facility's land. Sample SD-04 is representative of runoff from the drum storage area, the waste compactor, and the dust collection system. Sediment sample locations are shown on Figure 3.

6.4 Surface Water Pathway Analytical Results

Results of organic and inorganic sediment sampling are presented in Tables 4 and 5. Sample SC-SD-01 is designated as the background for the sediment media. Values for background sample results are presented either as a measured value or as the minimum quantitation limit (MQL). Samples containing concentrations of contaminants greater than three times the background level, or equal to or greater than the MQL of these contaminants are considered to be elevated. These samples are shaded on the tables and noted in the text.

6.4.1 Organic Sampling Results

The only elevated organic contaminant in sediments was benzyl butyl phthalate. This compound was detected at an estimated concentration of 7700 ug/kg (12 times MQL). Low concentrations of other polyaromatic hydrocarbons (PAHs) were detected in the other sediment samples, particularly SC-SD-02 (Table 4).

6.4.2 Inorganic Sampling Results

Elevated inorganics were detected only in sample SC-SD-03. Cadmium was found at an estimated concentration of 11 mg/kg (11 times MQL). Copper (estimated 95

TABLE 4
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
SIMMONS CASKET COMPANY
LANCASTER, GARRARD COUNTY, KENTUCKY

PARAMETERS (UG/KG)	Background	ONSITE		
	SC-SD-01	SC-SD-02	SC-SD-03	SC-SD-04
EXTRACTABLES				
PHENANTHRENE	650UJ	370J	68J	-
ANTHRACENE	650UJ	73J	-	-
FLUORANTHENE	650UJ	410J	140J	-
PYRENE	650UJ	280J	130J	-
BENZYL BUTYL PHTHALATE	650UJ	-	7700J	650J
BENZO(A) ANTHRACENE	650UJ	180J	100J	-
CHRYSENE	650UJ	180J	100J	-
BENZO (B AND/OR K) FLUORANTHENE	650UJ	240J	-	-
MISCELLANEOUS EXTRACTABLES				
BENZOTHAZOLE			90JN	
UNIDENTIFIED COMPOUNDS / NO.	3000J/3	600J/1		2000J/1

- Material analyzed for but not detected above minimum quantitation limit.
- U Material analyzed for but not detected above minimum quantitation limit.
The value is the minimum quantitation limit for the sample.
- J Estimated value
- N Presumptive evidence of presence of material

TABLE 5

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
SIMMONS CASKET COMPANY
LANCASTER, GARRARD COUNTY, KENTUCKY

Parameters (mg/kg)	Background	ONSITE		
	SC-SD-01	SC-SD-02	SC-SD-03	SC-SD-04
ALUMINUM	12000	13000	12000	14000
ARSENIC	9.6	8.7	10	8.5
BARIUM	79	120	96	70
BERYLLIUM	1.1	1.1	1.1	1.2
CADMIUM	1UJ	—	11J	—
CALCIUM	18000J	5500J	14000J	8600J
CHROMIUM	20	25	34	17
COBALT	18	20	28	18
COPPER	16J	11J	95J	14J
IRON	30000	29000	42000	32000
LEAD	38J	37J	61J	31J
MAGNESIUM	5500J	2500J	4500J	3600J
MANGANESE	1400J	1700J	2300J	1100J
NICKEL	13	12	13	17
POTASSIUM	850	1000	590	1100
SODIUM	44	54	43	66
VANADIUM	28	29	46	23
ZINC	55J	42J	370J	47J

— Material analyzed for but not detected above minimum quantitation limit.

U Material analyzed for but not detected above minimum quantitation limit.

The value is the minimum quantitation limit for the sample.

J Estimated value

mg/kg, 6 times background) and zinc (estimated 370 mg/kg, 6 times background) were also elevated in this sample (Table 5).

6.5 Conclusions

Generally, the sediments in the drainage pathways at Simmons Casket Company are not significantly contaminated. However, copper in SC-SD-03 is a concern, as it is directly attributable to Simmon's operations at the facility. Also found in SC-SD-03 is butyl benzyl phthalate which is attributable to casket painting and striping.

7.0 Soil Exposure and Air Pathways

7.1 Physical Conditions

The Simmons Casket Company occupies approximately 49 acres. It consists of a 100,000 square foot manufacturing plant plus an empty warehouse (Ref. 4). Located on the northeast side of the site property is a small hill of wood and metal debris mixed with soil. Lying west of the hill is the concrete drum storage pad, which was not being utilized during the sampling investigation. Other features of the site include wooded areas along the east and west perimeters of site boundaries (Ref. 4).

The facility is not fenced thus allowing easy access onto site property (Ref. 4). Stressed vegetation was observed along the southeastern portion of site property near the drum storage pad, the waste compactor, and the old loading dock (Ref. 4). Stained soil was also observed in these areas.

7.2 Soil and Air Targets

There are approximately 95 employees at Allison Abrasives, Inc. The nearest resident lives east of the facility on Industry Road, approximately 200 feet before the driveway of Allison Abrasives (Ref. 4). The nearest school is located within the city limits of Lancaster, approximately 0.4 miles north (Appendix A). One state threatened plant has been located within the 4 mile radius area from the site. The bigleaf snowball (*Styrax grandifolius*) was spotted about 2.5 miles north of the facility (Ref. 28). Total population within the 4-mile radius area of the site, based on topographic house counts plus data from the 1980 U. S. Census GEMS database is 7866 people (Refs. 27; 30; Appendix A). The specific ring radii contain the following populations: 0 - 0.25 mile, 138; 0.25 - 0.50 mile, 355; 0.50 - 1 mile, 3347; 1 - 2 miles, 1831; 2 - 3 miles, 581; 3 - 4 miles, 1614 (Refs. 27; 30; Appendix A).

7.3 Soil and Air Conclusions

Sampling at Simmons Casket Company indicates that contaminants have been released to the environment. Surface soil samples contained phenol, pyrene, PCB-1260, arsenic, calcium, copper, and zinc as well as low concentrations of magnesium and sodium (Appendix B). The PCB-1260 is not attributable to past activities at the Simmons Casket Company. Due to relatively low elevated levels of contaminants in the soil plus a small population in the Lancaster area, the soil exposure pathway is of little concern. The only targets of concern are the 95 employees on site and the state-threatened plant mentioned above.

Field soil gas (OVA and HNu) readings were conducted for health and safety reasons, however, no measurements above background were detected. The dust collection system is well contained and Allison Abrasive employees use proper respiratory protection when working in that area, otherwise there is no indication of a release to the air pathway.

8.0 Summary and Conclusions

The sampling investigation at Simmons Casket Company revealed a 4.73 acre source area of contaminated soil. This parcel of land is located on the east to southeast side of the manufacturing plant - an area that contains a drum storage pad, a hill of metal and wood debris, a waste compactor, a loading dock, and a dust collection system. Surface soil samples were conducted within the area of contaminated soil and revealed elevated levels of the following organic compounds: phenol, pyrene, and PCB-1260. Also revealed within the source area are the following elevated inorganics: arsenic, calcium, copper, zinc, magnesium, and sodium.

Sediment samples were collected in ditches that drain the entire site property. These sediment samples were placed along three sides of the site's perimeter, and revealed the following elevated contaminants: benzyl butyl phthalate, cadmium, copper and zinc. The fact that the levels of these contaminants were not high plus a lack of surface water targets, renders the surface water pathway a small concern at Simmons Casket Company, despite the recreational fishing that occurs nearby.

The groundwater pathway is also of small concern at the facility. Due to high salinity and high hydrogen sulfide concentrations in local groundwater, private wells are not

utilized. The municipal systems that serve the area withdraw their water from a surface water intake on the Kentucky River. The residents not connected to a system utilize cisterns.

The soil exposure pathway is of minimal concern at Simmons Casket Company. This is due to the small population of the area and the lack of endangered or threatened species within a four mile radius area surrounding the site. There is no documented release to the air pathway; however, onsite workers may become exposed to dust while working around the dust collector.

Due to the lack of targets in the area and the low concentrations of contaminants, no further action is recommended for the Simmons Casket Company.

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B&V WASTE SCIENCE AND TECHNOLOGY CORP.

1117 Perimeter Center West, Suite W-212, Atlanta, Georgia 30338, (404) 392-9227, Fax: (404) 392-9289

CARR

Site Assessment
Simmons Casket Company
Work Assignment # 11

BVWST Project 52011.020
BVWST File E.1
October 30, 1992

REC'D.

Mr. Al Hanke
Chief, Site Assessment
U. S. EPA Region IV
345 Courtland Street, N. E.
Atlanta, Georgia 30365

NOV 04 1992

WPB-SAC

Subject: Transmittal of Final Site Inspection

Dear Mr. Hanke:

As requested by Lofton Carr, Site Assessment Manager, please find enclosed three copies of the Final Site Inspection Report, along with two copies of the references and HRS score sheets, for the Simmons Casket Company, EPA ID # KYD050074889, located in Lancaster, Garrard County, Kentucky. All comments have been addressed.

Should you have any questions, please give us a call.

Very truly yours,

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

Carter J. Helm

Carter J. Helm
Project Scientist

ms
Enclosures

cc: Mr. Doug Thompson, EPA PO w/o enclosures
Mr. Keith Mills, EPA CO w/enclosures
Mr. Hubert Wieland, BVWST w/o enclosures

CONFIDENTIAL
Hazard Ranking System Preliminary Score
for
SIMMONS CASKET COMPANY
Lancaster, Garrard County, Kentucky

This preliminary score was calculated using the draft SI worksheets. Pathways evaluated include air, soil exposure, surface water, and groundwater. Results from the sampling investigation, which include surface soil and sediment samples, were utilized to determine the waste source in addition to the estimated waste quantity.

A hazardous waste quantity of 10 was calculated using the area that was sampled in which analysis indicated contamination. The 5,000 square foot area is located between the northeast to southeast corners of the manufacturing plant. This area includes the drum storage pad, the waste compactor, stained soil, and the dust collection systems. Contaminated soil is the waste source for the contaminants.

The hazardous substances that were found in samples include: phenol, benzyl butyl phthalate, pyrene, benzo(a)anthracene, PCB-1260, arsenic, and a few heavy metals. All four pathways were scored as potential.

The groundwater pathway scores the lowest due to no targets. The municipal systems utilize surface water, and residents without connections to the municipal systems use cisterns instead of private wells.

The surface water pathway does not contribute substantially to the score despite recreational fishing and swimming and endangered fish and mussel species on the pathway. The surface water intake used for municipal water systems in the area does not exist within the surface water pathway. The soil exposure pathway is the highest contributor to the overall score. Factors such as: workers onsite, contaminants in the surficial soils, and an endangered species nearby -- all are items which raise the pathway score.

The air pathway is of minimal concern and is, therefore, a low contributor to overall score. A sparsely populated area, plus containment of dusts produced onsite, do not support a serious threat to the air pathway.

Due to a low preliminary score, lack of targets and low concentrations of contaminants, no further action is recommended at the Simmons Casket Company facility.

S_{gw}	=	0.12
S_{sw}	=	3.72
S_{sc}	=	10.60
S_a	=	1.14
<hr/>		
Overall Score	=	5.65

Site Name: Simmons Casket Company

Location: Lancaster, Garrard County, Kentucky

GROUND WATER MIGRATION PATHWAY SCORESHEET

FACTOR CATEGORIES AND FACTORS

<u>Likelihood of Release to an Aquifer</u>	<u>Maximum Value</u>	<u>Value Assigned</u>	
1. Observed Release	550	--	
2. Potential to Release			
2a. Containment	10	--	
2b. Net Precipitation	10	--	
2c. Depth to Aquifer	5	--	
2d. Travel Time	35	--	
2e. Potential to Release [lines 2a x (2b + 2c + 2d)]	500	340	
Likelihood of Release (higher of lines 1 and 2e)	550		340
<u>Waste Characteristics</u>			
4. Toxicity/Mobility	a	100	
5. Hazardous Waste Quantity	a	10	
6. Waste Characteristics	100		6
<u>Targets</u>			
7. Nearest Well	50	0	
8. Population			
8a. Level I Concentrations	b	0	
8b. Level II Concentrations	b	0	
8c. Potential Contamination	b	0	
8d. Population (lines 8a + 8b + 8c)	b	0	
9. Resources	5	5	
10. Wellhead Protection Area	20	0	
11. Targets (lines 7 + 8d + 9 + 10)	b		5
<u>Ground Water Migration Score for an Aquifer</u>			
12. Aquifer Score [(lines 3 x 6 x 11)/82,500] ^c	100		.124
<u>Ground Water Migration Pathway Score</u>			
13. Pathway Score (S_{gw}), (highest value from line 12 for all aquifers evaluated) ^c	100		.124

^a Maximum value applies to waste characteristics category.

^b Maximum value not applicable.

^c Do not round to nearest integer.

Site Name: Simmons Casket Company

Location: Lancaster, Garrard County, Kentucky

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET

Factor Categories and Factors	Maximum Value	Value Assigned	
DRINKING WATER THREAT			
<u>Likelihood of Release</u>			
1. Observed Release	550	--	
2. Potential Release by Overland Flow			
2a. Containment	10	--	
2b. Runoff	25	--	
2c. Distance to Surface Water	25	--	
2d. Potential to Release by Overland Flow (lines 2a x (2b + 2c))	500	--	
3. Potential to Release by Flood			
3a. Containment (Flood)	10	--	
3b. Flood Frequency	50	--	
3c. Potential to Release by Flood (lines 3a x 3b)	500	--	
4. Potential to Release (lines 2d + 3c, subject to a maximum of 500)	500	--	
5. Likelihood of Release (higher of lines 1 and 4)	550		<u>400</u>
<u>Waste Characteristics</u>			
6. Toxicity/Presistence	a	10,000	
7. Hazardous Waste Quantity	a	10	
8. Waste Characteristics	100		<u>18</u>
<u>Targets</u>			
9. Nearest Intake	50	0	
10. Population			
10a. Level I Concentrations	b	0	
10b. Level II Concentrations	b	0	
10c. Potential Contamination	b	0	
10d. Population (lines 10a + 10b + 10c)	b	0	
11. Resources	5	0	
12. Targets (lines 9 + 10d + 11)	b		<u>5</u>
<u>Drinking Water Threat Score</u>			
13. Drinking Water Threat Score [(lines 5 x 8 x 12)/82,500, subject to a maximum of 100]	100		<u>.44</u>

Site Name: Simmons Casket Company

Location: Lancaster, Garrard County, Kentucky

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
(continued)

<u>Factor Categories and Factors</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
HUMAN FOOD CHAIN THREAT		
<u>Likelihood of Release</u>		
14. Likelihood of Release (same value as line 5)	550	<u>400</u>
<u>Waste Characteristics</u>		
15. Toxicity/Persistence/Bioaccumulation	a	<u>5×10^8</u>
16. Hazardous Waste Quantity	a	<u>10</u>
17. Waste Characteristics	1,000	<u>180</u>
<u>Targets</u>		
18. Food Chain Individual	50	<u>0</u>
19. Population		
19a. Level I Concentrations	b	<u>0</u>
19b. Level II Concentrations	b	<u>0</u>
19c. Potential Human Food Chain Contamination	b	<u>3</u>
19d. Population (lines 19a + 19b + 19c)	b	<u>3</u>
20. Targets (lines 18 + 19d)		<u>3</u>
<u>Human Food Chain Threat Score</u>		
21. Human Food Chain Threat Score [(lines 14 x 17 x 20)/82,5000, subject to a maximum of 100]	100	<u>2.62</u>
ENVIRONMENTAL THREAT		
<u>Likelihood of Release</u>		
22. Likelihood of Release (same value as line 5)	550	<u>400</u>

Site Name: Simmons Casket Company

Location: Lancaster, Garrard County, Kentucky

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
(continued)

<u>Factor Categories and Factors</u>		<u>Maximum Value</u>	<u>Value Assigned</u>
ENVIRONMENTAL THREAT, (concluded)			
<u>Waste Characteristics</u>			
23. Ecosystem Toxicity/Persistence/Bioaccumulation	a	<u>5 x 10⁸</u>	
24. Hazardous Waste Quantity	a	<u>10</u>	
25. Waste Characteristics	1,000		<u>180</u>
26. Sensitive Environments			
26a. Level I Concentrations	b	<u>--</u>	
26b. Level II Concentrations	b	<u>--</u>	
26c. Potential Contamination	b	<u>--</u>	
26d. Sensitive Environments (lines 26a + 26b + 26c)	b	<u>.75</u>	
<u>Targets</u>			
27. Targets (value from line 26d)			<u>.75</u>
<u>Environmental Threat Score</u>			
28. Environmental Threat Score [(lines 22 x 25 x 27)/82,500, subject to a maximum of 60]	60		<u>.66</u>
SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORE FOR A WATERSHED			
29. Watershed Score ^c (lines 13 + 21 + 28, subject to a maximum of 100)	100		<u>3.72</u>
SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORE			
30. Component Score (S _{oF}) ^c (highest score from line 29 for all watersheds evaluated, subject to a maximum of 100)	100		<u>3.72</u>

- ^a Maximum value applies to waste characteristics category.
^b Maximum value not applicable.
^c Do not round to nearest integer.

Site Name: Simmons Casket Company

Location: Lancaster, Garrard County, Kentucky

SOIL EXPOSURE PATHWAY SCORESHEET

<u>Factor Categories and Factors</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
--------------------------------------	----------------------	-----------------------

RESIDENT POPULATION THREAT

Likelihood of Exposure

1. Likelihood of Exposure	550		<u>550</u>
---------------------------	-----	--	------------

Waste Characteristics

2. Toxicity	a	<u>10,000</u>	
3. Hazardous Waste Quantity	a	<u>10</u>	
4. Waste Characteristics	100		<u>18</u>

Targets

5. Resident Individual	50	<u>0</u>	
6. Resident Population			
6a. Level I Concentrations	b	<u>0</u>	
6b. Level II Concentrations	b	<u>0</u>	
6c. Resident Population (lines 6a + 6b)	b	<u>0</u>	
7. Workers	15	<u>5</u>	
8. Resources	5	<u>0</u>	
9. Terrestrial Sensitive Environments	c	<u>75</u>	
10. Targets (lines 5 + 6c + 7 + 8 + 9)	b		<u>80</u>

Resident Population Threat Score

11. Resident Population Threat (lines 1 x 4 x 10)/82,500	b		<u>0</u>
---	---	--	----------

NEARBY POPULATION THREAT

Likelihood of Exposure

12. Attractiveness/Accessibility	100	<u>--</u>	
13. Area of Contamination	100	<u>--</u>	
14. Likelihood of Exposure	500		<u>--</u>

Waste Characteristics

15. Toxicity	a	<u>--</u>	
16. Hazardous Waste Quantity	a	<u>--</u>	
17. Waste Characteristics	100		<u>--</u>

Site Name: Simmons Casket Company

Location: Lancaster, Garrard County, Kentucky

SOIL EXPOSURE PATHWAY SCORESHEET
(continued)

<u>Factor Categories and Factors</u>		<u>Maximum Value</u>	<u>Value Assigned</u>
NEARBY POPULATION THREAT, (continued)			
<u>Targets</u>			
18. Nearby Individual	1	--	
19. Population Within 1 Mile	b	--	
20. Targets (lines 18 + 19)	b		--
<u>Nearby Population Threat Score</u>			
21. Nearby Population Threat (lines 14 x 17 x 20)	b		9.60
SOIL EXPOSURE PATHWAY SCORE		Nearby Population Threat: (Default Value)	
		1	
22. Soil Exposure Pathway Score ^d (S _e), (lines [11 + 21] subject to a maximum of 100)	100		10.60

^a Maximum value applies to waste characteristics category.

^b Maximum value not applicable.

^c No specific maximum value applies to factor. However pathway score based solely on sensitive environments is limited to maximum of 60.

^d Do not round to nearest integer.

Site Name: Simmons Casket Company

Location: Lancaster, Garrard County, Kentucky

AIR MIGRATION PATHWAY SCORESHEET

FACTOR CATEGORIES AND FACTORS

	<u>Likelihood of Release</u>	<u>Maximum Value</u>	<u>Value Assigned</u>
1.	Observed Release	550	--
2.	Potential to Release		
2a.	Gas Potential to Release	500	--
2b.	Particulate Potential to Release	500	--
2c.	Potential to Release (higher of lines 2a and 2b)	500	--
3.	Likelihood of Release (higher of lines 1 and 2c)	a	500
<u>Waste Characteristics</u>			
4.	Toxicity/Mobility	a	1
5.	Hazardous Waste Quantity	a	10
6.	Waste Characteristics	100	2
<u>Targets</u>			
7.	Nearest Individual	50	1
8.	Population		
8a.	Level I Concentrations	b	0
8b.	Level II Concentrations	b	0
8c.	Potential Contamination	b	18
8d.	Population (lines 8a + 8b + 8c)	b	18
9.	Resources	5	0
10.	Sensitive Environments		
10a.	Actual Contamination	c	0
10b.	Potential Contamination	c	75
10c.	Sensitive Environments (lines 10a + 10b)	c	75
11.	Targets (lines 7 + 8d + 9 + 10c)	b	94
<u>Air Migration Pathway Score</u>			
12.	Pathway Score (S_p)		
	$[(\text{lines } 3 \times 6 \times 11)/82,500]^d$	100	1.14

a Maximum value applies to waste characteristics category.

b Maximum value not applicable.

c No specific maximum value applies to factor. However pathway score based solely on sensitive environments is limited to maximum of 60.

d Do not round to nearest integer.

SAS
REPORT REVIEW CHECKLIST

PA SI SIP ESI

SITE NAME : SIMMONS ASKET Co

EPA ID : ~~UTMD~~ KYDO50074889

WASTELAN ID: 1994

☒ - DO COMMENT LETTER, IF NECESSARY.

☐ - MARK DISPOSITION ON REPORT.

☒ - ENTER INTO WASTELAN.

NA - DO TASKING FORM, IF NECESSARY:

☐ - ADD EVENT TO WASTELAN.

☒ - CALL ARCS IF FINAL.

☒ - DO DISPOSITION FORM.

☐ - REMOVE HRS & STAMP FOIA EXEMPT MATERIALS.

☐ - REFER/DEFER TO ERRB/RCRA, IF APPLICABLE.

☐ - SEND COPY OF REPORT TO STATE.

☐ - SEND COPY OF REPRT TO PRP, AS DEEMED APPROPRIATE.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

DISPOSITION NOTIFICATION FORM

SITE NAME: SIMMONS CASKET COMPANY

EPA ID. NO. : KYD050074889

REF. NO. : 1994

EPA PROJECT MANAGER: LOFTEN CARR

[Signature] 8/28/92

EVENT LEAD: EPA

EVENT TYPE: SI

REPORT PREPARER: CARTER HELM

RECOMMENDED DISPOSITION: NO FURTHER ACTION

APPROVED DISPOSITION: SITE EVALUATION ACCOMPLISHED (NFRAP)

APPROVAL DATE: AUGUST 28, 1992

APPENDIX A
Topographic Map

OVERSIZED

DOCUMENT

MAP

APPENDIX B

Analytical Data

ORGANIC DATA QUALIFIER REPORT

Case Number 17847 Project Number 92-0331 SAS Number
Site ID. Simmons Casket Co., Lancaster, KY.

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Volatiles</u>			
none			
<u>Extractables</u>			
all samples	all extractables	J	excessive extraction holding time
<u>Pesticides</u>			
all samples	aldrin	J	low GPC recovery

INORGANIC DATA QUALIFIERS REPORT

Case Number: 17847

Project Number: 92-0331

Site: Simmons Casket Co., Lancaster, KY

Element	Flag	Samples Affected	Reason
Al, Cd, Cr, Fe Mn, V, Zn	U	All positives > IDL, but < CRDL	Baseline Instability
Ba	U	All positives > IDL, but < 10X contaminant level	Positives in blanks
Sb	J	All positives All negatives	Matrix spike recovery = 26.5%
Cd	J	All	Matrix spike recovery = 60.9%
Cu	J	All positives	Matrix spike recovery = 669.1%
Se	J	All	Matrix spike recovery = 63.9%
Ag	J	All	Matrix spike recovery = 58.7%
Zn	J	All	Matrix spike recovery = 59.5%
Ca	J	All	Matrix duplicate RPD = 62.5%
Pb	J	All	Matrix duplicate RPD = 43.3%
Mg	J	All	Matrix duplicate RPD = 36.4%
Mn	J	All	Matrix duplicate RPD = 42.2%
Pb	J	MDCL62 and MDCL63	Duplicate MSA r < .995
Cd	J	MDCL61	% RSD > 20% for ICP multiple exposures
Be	J	MDCL63	% RSD > 20% for ICP multiple exposures

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-01 COLLECTION START: 02/26/92 1130 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL57 **
**

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
10UR	ANTIMONY	0.14U	MERCURY
10J	CADMIUM	1.30J	SELENIUM
		1.60J	SILVER
		0.67U	THALLIUM
		NA	TIN
		42	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-01 COLLECTION START: 02/26/92 1130 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL57 MD NO: CL57 **
*** **

RESULTS UNITS PARAMETER
8.5U MG/KG CYANIDE

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-02 COLLECTION START: 02/26/92 1300 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL58 **
**

MG/KG ANALYTICAL RESULTS

8.8UR ARSENIC
20J CADMIUM
20J CHROMIUM
20J COPPER
20J IRON
20J MANGANESE
20J NICKEL
20J SILVER
20J THALLIUM
20J TIN
20J ZINC

MG/KG ANALYTICAL RESULTS

0.14U MERCURY
1.20J SELENIUM
1.40J SILVER
0.60U THALLIUM
NA TIN
34 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-02 COLLECTION START: 02/26/92 1300 STOP: 00/00/00 **
** CASE.NO.: 17847 SAS NO.: D. NO.: CL58 MD NO: CL58 **
*** **

RESULTS UNITS PARAMETER
7.5U MG/KG CYANIDE

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-03 COLLECTION START: 02/26/92 1340 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL59 **
**

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7.2UR	ANTIMONY	0.11U	MERCURY
		0.94UJ	SELENIUM
		1.2UJ	SILVER
		0.47U	THALLIUM
		NA	TIN
		17	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
*** ** ** ** **
** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-03 COLLECTION START: 02/26/92 1340 STOP: 00/00/00 **
** CASE.NO.: 17847 SAS NO.: D. NO.: CL59 MD NO: CL59 **
** ** ** **
```

RESULTS UNITS PARAMETER
5.9U MG/KG CYANIDE

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-04 COLLECTION START: 02/26/92 1450 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL60 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1000	ANTIMONY	0.15U	MERCURY
10UR			
		1.30J	SELENIUM
20J	CADMIUM	1.60J	SILVER
		0.63U	THALLIUM
		NA	TIN
		40	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-04 COLLECTION START: 02/26/92 1450 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL60 MD NO: CL60 **
**

RESULTS UNITS PARAMETER
8.1U MG/KG CYANIDE

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL
** SOURCE: SIMMONS CASKET CO
** STATION ID: SD-01

*** CASE NO.: 17847 SAS NO.: D. NO.: CL57

*** UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

20U CHLOROMETHANE	20U 1,2-DICHLOROPROPANE
20U BROMOMETHANE	20U CIS-1,3-DICHLOROPROPENE
20U VINYL CHLORIDE	20U TRICHLOROETHENE (TRICHLOROETHYLENE)
20U CHLOROETHANE	20U DIBROMOCHLOROMETHANE
40U METHYLENE CHLORIDE	20U 1,1,2-TRICHLOROETHANE
20U ACETONE	20U BENZENE
20U CARBON DISULFIDE	20U TRANS-1,3-DICHLOROPROPENE
20U 1,1-DICHLOROETHANE	20U BROMOFORM
20U 1,1-DICHLOROETHANE (1,1-DICHLOROETHYLENE)	20U METHYL ISOBUTYL KETONE
20U 1,2-DICHLOROETHANE (TOTAL)	20U METHYL BUTYL KETONE
20U CHLOROFORM	20U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
20U 1,2-DICHLOROETHANE	20U 1,1,2,2-TETRACHLOROETHANE
20U METHYL ETHYL KETONE	20U TOLUENE
20U 1,1,1-TRICHLOROETHANE	20U CHLOROBENZENE
20U CARBON TETRACHLORIDE	20U ETHYL BENZENE
20U BROMODICHLOROMETHANE	20U STYRENE
	20U TOTAL XYLENES
	49 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 1130 STOP: 00/00/00

*** CASE NO.: 17847

SAS NO.:

D. NO.: CL57

UG/KG

ANALYTICAL RESULTS

UG/KG

ANALYTICAL RESULTS

650UJ	PHENOL	1600UJ	3-NITROANILINE
650UJ	BIS(2-CHLOROETHYL) ETHER	650UJ	ACENAPHTHENE
650UJ	2-CHLOROPHENOL	1600UJ	2,4-DINITROPHENOL
650UJ	1,3-DICHLOROBENZENE	1600UJ	4-NITROPHENOL
650UJ	1,4-DICHLOROBENZENE	650UJ	DIBENZOFURAN
650UJ	1,2-DICHLOROBENZENE	650UJ	2,4-DINITROTOLUENE
650UJ	2-METHYLPHENOL	650UJ	DIETHYL PHTHALATE
650UJ	2,2'-CHLOROISOPROPYLETHYR	650UJ	4-CHLOROPHENYL PHENYL ETHER
650UJ	(3-AND/OR 4-)METHYLPHENOL	650UJ	FLUORENE
650UJ	N-NITROSODI-N-PROPYLAMINE	1600UJ	4-NITROANILINE
650UJ	HEXACHLOROETHANE	1600UJ	2-METHYL-4,6-DINITROPHENOL
650UJ	NITROBENZENE	650UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
650UJ	ISOPHORONE	650UJ	4-BROMOPHENYL PHENYL ETHER
650UJ	2-NITROPHENOL	1600UJ	HEXACHLOROBENZENE (HCB)
650UJ	2,4-DIMETHYLPHENOL	650UJ	PENTACHLOROPHENOL
650UJ	BIS(2-CHLOROETHOXY) METHANE	650UJ	PHENANTHRENE
650UJ	2,4-DICHLOROPHENOL	650UJ	ANTHRACENE
650UJ	1,2,4-TRICHLOROBENZENE	650UJ	CARBAZOLE
650UJ	NAPHTHALENE	650UJ	DI-N-BUTYL PHTHALATE
650UJ	4-CHLORANILINE	650UJ	FLUORANTHENE
650UJ	HEXACHLOROBUTADIENE	650UJ	PYRENE
650UJ	4-CHLORO-3-METHYLPHENOL	650UJ	BENZYL BUTYL PHTHALATE
650UJ	2-METHYLNAPHTHALENE	650UJ	3,3'-DICHLOROBENZIDINE
650UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)	650UJ	CHRYSENE
650UJ	2,4,6-TRICHLOROPHENOL	650UJ	BIS(2-ETHYLHEXYL) PHTHALATE
1600UJ	2,4,5-TRICHLOROPHENOL	650UJ	DI-N-OCTYL PHTHALATE
650UJ	2-CHLORONAPHTHALENE	650UJ	BENZO(B AND/OR K)FLUORANTHENE
1600UJ	2-NITROANILINE	650UJ	BENZO-A-PYRENE
650UJ	DIMETHYL PHTHALATE	650UJ	INDENO (1,2,3-CD) PYRENE
650UJ	ACENAPHTHYLENE	650UJ	DIBENZO(A,H)ANTHRACENE
650UJ	2,6-DINITROTOLUENE	650UJ	BENZO(GH)PERYLENE
		49	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-01 COLLECTION START: 02/26/92 1130 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL57 MD NO: CL57 **
**

ANALYTICAL RESULTS UG/KG

~~XX~~

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL ***
 *** SOURCE: SIMMONS CASKET CO ***
 *** STATION ID: SD-01 ***
 *** CASE NUMBER: 17847 ***
 *** SAS NUMBER: ***

UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

3.3U ALPHA-BHC	33U METHOXYCHLOR
3.3U BETA-BHC	6.5U ENDRIN KETONE
3.3U DELTA-BHC	6.5U ENDRIN ALDEHYDE
3.3U GAMMA-BHC (LINDANE)	3.3U CHLORDANE (TECH. MIXTURE) /1
3.3U HEPTACHLOR	3.3U GAMMA-CHLORDANE /2
3.3U ALDRIN	330U TOXAPHENE
3.3U HEPTACHLOR EPOXIDE	65U PCB-1016 (AROCOR 1016)
3.3U ENDOSULFAN I (ALPHA)	130U PCB-1221 (AROCOR 1221)
6.5U DIELDRIN	65U PCB-1232 (AROCOR 1232)
6.5U 4,4'-DDE (P,P'-DDE)	65U PCB-1242 (AROCOR 1242)
6.5U ENDRIN	65U PCB-1248 (AROCOR 1248)
6.5U ENDOSULFAN II (BETA)	65U PCB-1254 (AROCOR 1254)
6.5U 4,4'-DDD (P,P'-DDD)	65U PCB-1260 (AROCOR 1260)
6.5U ENDOSULFAN SULFATE	49 PERCENT MOISTURE
6.5U 4,4'-DDT (P,P'-DDT)	

REMARKS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-OC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-02 COLLECTION START: 02/26/92 1300 STOP: 00/00/00 **

** CASE NO.: 17847 SAS NO.: D. NO.: CL58 **

UG/KG ANALYTICAL RESULTS

15U CHLOROMETHANE
15U BROMOMETHANE
15U VINYL CHLORIDE
15U CHLOROETHANE
40U METHYLENE CHLORIDE
15U ACETONE
15U CARBON DISULFIDE
15U 1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
15U 1,1-DICHLOROETHANE
15U 1,2-DICHLOROETHENE (TOTAL)
15U CHLOROFORM
15U 1,2-DICHLOROETHANE
15U METHYL ETHYL KETONE
15U 1,1,1-TRICHLOROETHANE
15U CARBON TETRACHLORIDE
15U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

15U 1,2-DICHLOROPROPANE
15U CIS-1,3-DICHLOROPROPENE
15U TRICHLOROETHENE (TRICHLOROETHYLENE)
15U DIBROMOCHLOROMETHANE
15U 1,1,2-TRICHLOROETHANE
15U BENZENE
15U TRANS-1,3-DICHLOROPROPENE
15U BROMOFORM
15U METHYL ISOBUTYL KETONE
15U METHYL BUTYL KETONE
15U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
15U 1,1,2,2-TETRACHLOROETHANE
15U TOLUENE
15U CHLOROBENZENE
15U ETHYL BENZENE
15U STYRENE
15U TOTAL XYLENES
34 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

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*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-02 COLLECTION START: 02/26/92 1300 STOP: 00/00/00 **
**
** CASE NO.: 17847 SAS NO.: D. NO.: CL58 **
*** **
  
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UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
500UJ	PHENOL	1200UJ	3-NITROANILINE
500UJ	BIS(2-CHLOROETHYL) ETHER	500UJ	ACENAPHTHENE
500UJ	2-CHLOROPHENOL	1200UJ	2,4-DINITROPHENOL
500UJ	1,3-DICHLOROBENZENE	1200UJ	4-NITROPHENOL
500UJ	1,4-DICHLOROBENZENE	500UJ	DIBENZOFURAN
500UJ	1,2-DICHLOROBENZENE	500UJ	2,4-DINITROTOLUENE
500UJ	2-METHYLPHENOL	500UJ	DIETHYL PHTHALATE
500UJ	2,2'-CHLOROISOPROPYLETHER	500UJ	4-CHLOROPHENYL PHENYL ETHER
500UJ	(3-AND/OR 4-)METHYLPHENOL	500UJ	FLUORENE
500UJ	N-NITROSODI-N-PROPYLAMINE	1200UJ	4-NITROANILINE
500UJ	HEXACHLOROETHANE	1200UJ	2-METHYL-4,6-DINITROPHENOL
500UJ	NITROBENZENE	500UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
500UJ	ISOPHORONE	500UJ	4-BROMOPHENYL PHENYL ETHER
500UJ	2-NITROPHENOL	500UJ	HEXACHLOROENZENE (HCB)
500UJ	2,4-DIMETHYLPHENOL	1200UJ	PENTACHLOROPHENOL
500UJ	BIS(2-CHLOROETHOXY) METHANE		
500UJ	2,4-DICHLOROPHENOL		
500UJ	1,2,4-TRICHLOROBENZENE	500UJ	CARBAZOLE
500UJ	NAPHTHALENE	500UJ	DI-N-BUTYLPHTHALATE
500UJ	4-CHLOROANILINE		
500UJ	HEXACHLOROBUTADIENE		
500UJ	4-CHLORO-3-METHYLPHENOL	500UJ	BENZYL BUTYL PHTHALATE
500UJ	2-METHYLNAPHTHALENE	500UJ	3,3'-DICHLOROENZIDINE
500UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)		
500UJ	2,4,6-TRICHLOROPHENOL		
1200UJ	2,4,5-TRICHLOROPHENOL	500UJ	BIS(2-ETHYLHEXYL) PHTHALATE
500UJ	2-CHLORONAPHTHALENE	500UJ	DI-N-OCTYLPHTHALATE
1200UJ	2-NITROANILINE		
500UJ	DIMETHYL PHTHALATE		
500UJ	ACENAPHTHYLENE	500UJ	BENZO-A-PYRENE
500UJ	2,6-DINITROTOLUENE	500UJ	INDENO (1,2,3-CD) PYRENE
		500UJ	DIBENZO(A,H)ANTHRACENE
		500UJ	BENZO(GH)PERYLENE
		34	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL
SOURCE: SIMMONS CASKET CO
STATION ID: SD-02
CASE NUMBER: 17847

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 1300 STOP: 00/00/00
D. NUMBER: CL58

UG/KG ANALYTICAL RESULTS

UG/KG ANALYTICAL RESULTS

2.5U ALPHA-BHC
2.5U BETA-BHC
2.5U DELTA-BHC
2.5U GAMMA-BHC (LINDANE)
2.5U HEPTACHLOR
2.5U ALDRIN
2.5U HEPTACHLOR EPOXIDE
2.5U ENDOSULFAN I (ALPHA)
4.9U DIELDRIN
4.9U 4,4'-DDE (P,P'-DDE)
4.9U ENDRIN
4.9U ENDOSULFAN II (BETA)
4.9U 4,4'-DDD (P,P'-DDD)
4.9U ENDOSULFAN SULFATE
4.9U 4,4'-DDT (P,P'-DDT)

25U METHOXYCHLOR
4.9U ENDRIN KETONE
4.9U CHLORDANE ALDEHYDE
2.5U GAMMA-CHLORDANE MIXTURE /1
2.5U ALPHA-CHLORDANE /2
250U TOXAPHENE
49U PCB-1016 (AROCOR 1016)
99U PCB-1221 (AROCOR 1221)
49U PCB-1232 (AROCOR 1232)
49U PCB-1242 (AROCOR 1242)
49U PCB-1248 (AROCOR 1248)
49U PCB-1254 (AROCOR 1254)
49U PCB-1260 (AROCOR 1260)
34 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT
*R-OC INDICATES THAT DATA UNUSABLE. 1. WHEN NO VALUE IS REPORTED. SEE CHLORDANE CONSTITUENTS.
*C-CONFIRMED BY GCMS

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

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*** **
** PROJECT NO. 92-0331  SAMPLE NO. 65465  SAMPLE TYPE: SOIL  PROG ELEM: NSF  COLLECTED BY: B STAFFORD  **
** SOURCE: SIMMONS CASKET CO  CITY: LANCASTER  ST: KY  **
** STATION ID: SD-03  COLLECTION START: 02/26/92  1340  STOP: 00/00/00  **
**
** CASE NO.: 17847  SAS NO.:  D. NO.: CL59  **
*** **
  
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UG/KG ANALYTICAL RESULTS

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13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
30U METHYLENE CHLORIDE
13U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13U 1,1,1-TRICHLOROETHANE
13U CARBON TETRACHLORIDE
13U BROMODICHLOROMETHANE
  
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UG/KG ANALYTICAL RESULTS

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13U 1,2-DICHLOROPROPANE
13U CIS-1,3-DICHLOROPROPENE
13U TRICHLOROETHENE (TRICHLOROETHYLENE)
13U DIBROMOCHLOROMETHANE
13U 1,1,2-TRICHLOROETHANE
13U BENZENE
13U TRANS-1,3-DICHLOROPROPENE
13U BROMOFORM
13U METHYL ISOBUTYL KETONE
13U METHYL BUTYL KETONE
13U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
13U 1,1,2,2-TETRACHLOROETHANE
13U TOLUENE
13U CHLOROBENZENE
13U ETHYL BENZENE
13U STYRENE
13U TOTAL XYLENES
22 PERCENT MOISTURE
  
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REMARKS

REMARKS

FOOTNOTES

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*A-AVERAGE VALUE  *NA-NOT ANALYZED  *NAI-INTERFERENCES  *J-ESTIMATED VALUE  *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN  *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
  
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASSET CO
*** STATION ID: SD-03

*** CASE NO.: 17847

*** ANALYTICAL RESULTS

*** ANALYTICAL RESULTS

*** D. NO.: CL59

*** ANALYTICAL RESULTS

4300J	PHENOL	1100J	3-NITROANILINE
4300J	BIS(2-CHLOROETHYL) ETHER	4300J	ACENAPHTHENE
4300J	2-CHLOROPHENOL	1100J	2,4-DINITROPHENOL
4300J	1,3-DICHLOROBENZENE	4300J	4-NITROPHENOL
4300J	1,4-DICHLOROBENZENE	4300J	DIBENZOFURAN
4300J	1,2-DICHLOROBENZENE	4300J	2,4-DINITROTOLUENE
4300J	2-METHYLPHENOL	4300J	DIETHYL PHTHALATE
4300J	2,2'-CHLORISOPROPYLETHYER	4300J	4-CHLOROPHENYL PHENYL ETHER
4300J	(3-AND/OR 4-)METHYLPHENOL	4300J	FLUORENE
4300J	N-NITROSODI-N-PROPYLAMINE	1100J	4-NITROANILINE
4300J	HEXACHLOROETHANE	1100J	2-METHYL-4,6-DINITROPHENOL
4300J	NITROBENZENE	4300J	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
4300J	1,2-DIMETHYLPHENOL	4300J	4-BROMOPHENYL PHENYL ETHER
4300J	2,4-DIMETHYLPHENOL	4300J	HEXACHLOROBENZENE (HCB)
4300J	BIS(2-CHLOROETHOXY) METHANE	1100J	PENTACHLOROPHENOL
4300J	2,4-DICHLOROPHENOL	4300J	ANTHRACENE
4300J	1,2,4-TRICHLOROBENZENE	4300J	CARBAZOLE
4300J	NAPHTHALENE	4300J	DI-N-BUTYL PHTHALATE
4300J	4-CHLOROANILINE	4300J	1,2,3,4,5-PENTACHLOROBENZENE
4300J	HEXACHLOROBUTADIENE	4300J	3,3'-DICHLOROBENZIDINE
4300J	4-CHLORO-3-METHYLPHENOL	4300J	ANTHRACENE
4300J	2-METHYLNAPHTHALENE	4300J	BIS(2-ETHYLHEXYL) PHTHALATE
4300J	HEXACHLOROCYCLOPENTADIENE (HCCP)	4300J	DI-N-OCTYLPHTHALATE
1100J	2,4,6-TRICHLOROPHENOL	4300J	BENZO(B AND/OR K)FLUORANTHENE
4300J	2-CHLORONAPHTHALENE	4300J	BENZO-A-PYRENE
1100J	2-NITROANILINE	4300J	INDENO (1,2,3-CD) PYRENE
4300J	DIMETHYL PHTHALATE	4300J	DIBENZO(A,H)ANTHRACENE
4300J	ACENAPHTHYLENE	4300J	BENZO(GH)PERYLENE
4300J	2,6-DINITROTOLUENE	22	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE
*K-ACTUAL VALUE
*J-ESTIMATED VALUE
*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*R-OC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-03 COLLECTION START: 02/26/92 1340 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL59 MD NO: CL59 **
**

ANALYTICAL RESULTS UG/KG

~~CONFIDENTIAL~~

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SD-03
*** CASE NUMBER: 17847
*** SAS NUMBER:
*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER ST: KY
*** COLLECTION START: 02/26/92 1340 STOP: 00/00/00
*** D. NUMBER: CL59

*** UG/KG *** ANALYTICAL RESULTS *** ANALYTICAL RESULTS ***

2.0U	ALPHA-BHC	2.0U	METHOXYCHLOR
2.0U	BETA-BHC	4.1U	ENDRIN KETONE
2.0U	DELTA-BHC	4.1U	ENDRIN ALDEHYDE
2.0U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
2.0U	HEPTACHLOR	2.0U	GAMMA-CHLORDANE /2
2.0UJ	ALDRIN	2.0U	ALPHA-CHLORDANE /2
2.0U	HEPTACHLOR EPOXIDE	200U	TOXAPHENE
2.0U	ENDOSULFAN I (ALPHA)	41U	PCB-1016 (AROCOR 1016)
4.1U	DIELDRIN	82U	PCB-1221 (AROCOR 1221)
4.1U	4,4'-DDE (P,P'-DDE)	41U	PCB-1232 (AROCOR 1232)
4.1U	ENDRIN	41U	PCB-1242 (AROCOR 1242)
4.1U	ENDOSULFAN II (BETA)	41U	PCB-1248 (AROCOR 1248)
4.1U	4,4'-DDD (P,P'-DDD)	41U	PCB-1254 (AROCOR 1254)
4.1U	ENDOSULFAN SULFATE	41U	PCB-1260 (AROCOR 1260)
4.1U	4,4'-DDT (P,P'-DDT)	22	PERCENT MOISTURE

REMARKS

REMARKS

*** FOOTNOTES ***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

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*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-04 COLLECTION START: 02/26/92 1450 STOP: 00/00/00 **
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** CASE NO.: 17847 SAS NO.: D. NO.: CL60 **
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UG/KG ANALYTICAL RESULTS

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17U CHLOROMETHANE
17U BROMOMETHANE
17U VINYL CHLORIDE
17U CHLOROETHANE
30U METHYLENE CHLORIDE
17U ACETONE
17U CARBON DISULFIDE
17U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
17U 1,1-DICHLOROETHANE
17U 1,2-DICHLOROETHENE (TOTAL)
17U CHLOROFORM
17U 1,2-DICHLOROETHANE
17U METHYL ETHYL KETONE
17U 1,1,1-TRICHLOROETHANE
17U CARBON TETRACHLORIDE
17U BROMODICHLOROMETHANE

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UG/KG ANALYTICAL RESULTS

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17U 1,2-DICHLOROPROPANE
17U CIS-1,3-DICHLOROPROPENE
17U TRICHLOROETHENE(TRICHLOROETHYLENE)
17U DIBROMOCHLOROMETHANE
17U 1,1,2-TRICHLOROETHANE
17U BENZENE
17U TRANS-1,3-DICHLOROPROPENE
17U BROMOFORM
17U METHYL ISOBUTYL KETONE
17U METHYL BUTYL KETONE
17U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
17U 1,1,2,2-TETRACHLOROETHANE
17U TOLUENE
17U CHLOROBENZENE
17U ETHYL BENZENE
17U STYRENE
17U TOTAL XYLENES
40 PERCENT MOISTURE

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REMARKS

REMARKS

FOOTNOTES

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*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD. ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

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***** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL *****
***** SOURCE: SIMMONS CASKET CO *****
***** STATION ID: SD-04 *****

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***** COLLECTED BY: B STAFFORD
 PROG ELEM: NSF
 CITY: LANCASTER
 COLLECTION START: 02/26/92 1450 STOP: 00/00/00

CASE NO.: 17847

D. NO.: CL60

SAS NO.:

ANALYTICAL RESULTS

ANALYTICAL RESULTS

UG/KG

5400J	PHENOL	1400UJ	3-NITROANILINE
5400J	BIS(2-CHLOROETHYL) ETHER	5400J	ACENAPHTHENE
5400J	2-CHLOROPHENOL	1400UJ	2,4-DINITROPHENOL
5400J	1,3-DICHLOROBENZENE	1400UJ	4-NITROPHENOL
5400J	1,4-DICHLOROBENZENE	5400J	DIBENZOFURAN
5400J	1,2-DICHLOROBENZENE	5400J	2,4-DINITROTOLUENE
5400J	2-METHYLPHENOL	5400J	DIETHYL PHTHALATE
5400J	2,2'-CHLOROISOPROPYLETHER	5400J	4-CHLOROPHENYL PHENYL ETHER
5400J	(3-AND/OR 4-)METHYLPHENOL	5400J	FLUORENE
5400J	N-NITROSODI-N-PROPYLAMINE	1400UJ	4-NITROANILINE
5400J	HEXACHLOROETHANE	1400UJ	2-METHYL-4,6-DINITROPHENOL
5400J	NITROBENZENE	5400J	N-NITROSODIPHENYLAMINE(DIPHENYLAMINE
5400J	ISOPHORONE	5400J	4-BROMOPHENYL PHENYL ETHER
5400J	2-NITROPHENOL	5400J	HEXACHLOROBENZENE (HCB)
5400J	2,4-DIMETHYLPHENOL	1400UJ	PENTACHLOROPHENOL
5400J	BIS(2-CHLOROETHOXY) METHANE	5400J	PHENANTHRENE
5400J	1,2,4-TRICHLOROBENZENE	5400J	ANTHRACENE
5400J	NAPHTHALENE	5400J	CARBAZOLE
5400J	4-CHLOROANILINE	5400J	DI-N-BUTYLPHTHALATE
5400J	HEXACHLOROBUTADIENE	5400J	FLUORANTHENE
5400J	4-CHLORO-3-METHYLPHENOL	5400J	PYRENE
5400J	2-METHYLNAPHTHALENE	5400J	3,3'-DICHLOROBENZIDINE
5400J	HEXACHLOROCYCLOPENTADIENE (HCCP)	5400J	BENZO(A)ANTHRACENE
5400J	2,4,6-TRICHLOROPHENOL	5400J	CHRYSENE
1400UJ	2,4,5-TRICHLOROPHENOL	5400J	BIS(2-ETHYLHEXYL) PHTHALATE
5400J	2-CHLORONAPHTHALENE	5400J	DI-N-OCTYLPHTHALATE
5400J	2-NITROANILINE	5400J	BENZO(B AND/OR K)FLUORANTHENE
1400UJ	DIMETHYL PHTHALATE	5400J	BENZO-A-PYRENE
5400J	ACENAPHTHYLENE	5400J	INDENO (1,2,3-CD) PYRENE
5400J	2,6-DINITROTOLUENE	5400J	DIBENZO(A,H)ANTHRACENE
		5400J	BENZO(GH)PERYLENE
		40	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

FOOTNOTES***

*A-AVERAGE VALUE	*NA-NOT ANALYZED	*M1-INTERFERENCES	*J-ESTIMATED VALUE	*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE	IS KNOWN TO BE LESS THAN VALUE GIVEN	*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN		
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.				
*R-OC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.				

04/13/92

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*****
** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-04 COLLECTION START: 02/26/92 1450 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL60 MD NO: CL60 **
**
*****

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~~2009-2010 RELEASED COMPOUND~~

FOOTNOTES***
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SD-04
*** CASE NUMBER: 17847 SAS NUMBER:

*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER ST: KY
*** COLLECTION START: 02/26/92 1450 STOP: 00/00/00
*** D. NUMBER: CL60

UG/KG ANALYTICAL RESULTS

UG/KG ANALYTICAL RESULTS

2.7U	ALPHA-BHC	27U	METHOXYCHLOR
2.7U	BETA-BHC	5.5U	ENDRIN KETONE
2.7U	DELTA-BHC	5.5U	CHLORDANE (TECH. MIXTURE) /1
2.7U	GAMMA-BHC (LINDANE)	2.7U	GAMMA-CHLORDANE /2
2.7U	HEPTACHLOR	2.7U	ALPHA-CHLORDANE
2.7U	ALDRIN	270U	TOXAPHENE
2.7U	HEPTACHLOR EPOXIDE	55U	PCB-1016 (AROCOR 1016)
2.7U	ENDOSULFAN I (ALPHA)	170U	PCB-1221 (AROCOR 1221)
5.5U	DIELDRIN	55U	PCB-1232 (AROCOR 1232)
5.5U	4,4'-DDE (P,P'-DDE)	55U	PCB-1242 (AROCOR 1242)
5.5U	ENDRIN	55U	PCB-1248 (AROCOR 1248)
5.5U	ENDOSULFAN II (BETA)	55U	PCB-1254 (AROCOR 1254)
5.5U	4,4'-DDD (P,P'-DDD)	55U	PCB-1260 (AROCOR 1260)
5.5U	ENDOSULFAN SULFATE	40	PERCENT MOISTURE
5.5U	4,4'-DDT (P,P'-DDT)		

REMARKS

REMARKS

FOOTNOTES
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 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65462 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-01 COLLECTION START: 02/26/92 0940 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL56 **
**

MG/KG ANALYTICAL RESULTS

8.4UR ANTIMONY
1.0UR
2.0UR
2.0UR
1.4UR
6.0UR
6.0UR

0.13U MERCURY
5.30U SELENIUM
1.40U SILVER
0.53U THALLIUM
NA TIN
29 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65462 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-01 COLLECTION START: 02/26/92 0940 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL56 MD NO: CL56 **
** **

RESULTS UNITS PARAMETER
6.9U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL61 **
**

*** **
MG/KG ANALYTICAL RESULTS MG/KG ANALYTICAL RESULTS
8.7UR ANTIMONY 0.12U MERCURY
2.0UR [REDACTED] 1.1UJ SELENIUM
2.0UR [REDACTED] 1.4UJ SILVER
1.0UR [REDACTED] 0.55U THALLIUM
1.0UR [REDACTED] NA TIN
3.0UR [REDACTED] 2.0UR [REDACTED]
1.0UR [REDACTED] 30 PERCENT MOISTURE
3.0UR [REDACTED]

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL61 MD NO: CL61 **
**

RESULTS UNITS PARAMETER
6.9U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-03 COLLECTION START: 02/26/92 1630 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL62 **
**

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7.6UR	ANTIMONY	0.13U	MERCURY
1			
20J	CADMIUM	4.90J	SELENIUM
		1.20J	SILVER
		0.49U	THALLIUM
		NA	TIN
		25	PERCENT MOISTURE
3			

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-03 COLLECTION START: 02/26/92 1630 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL62 MD NO: CL62 **
*** **

RESULTS UNITS PARAMETER
6.4U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-04 COLLECTION START: 02/26/92 1705 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL63 **
*** **

MG/KG ANALYTICAL RESULTS

7.8UR ARSENIC
ANTIMONY
BARIUM
BISMUTH
CADMIUM
CHROMIUM
COBALT
COPPER
IRON
LEAD
MANGANESE
MERCURY
NICKEL
SILVER
THALLIUM
TIN
VANADIUM
ZINC

MG/KG ANALYTICAL RESULTS

4.0UR ARSENIC
0.11U MERCURY
1.0UR BARIUM
4.70U SELENIUM
1.30U SILVER
0.47U THALLIUM
NA TIN
20U VANADIUM
21 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-04 COLLECTION START: 02/26/92 1705 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL63 MD NO: CL63 **
** **

RESULTS UNITS PARAMETER
6.1U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-05 COLLECTION START: 02/26/92 1755 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL64 **

MG/KG ANALYTICAL RESULTS

7.6UR ANTIMONY
NIC
10J CADMIUM
1 THALLIUM
3
2
200 LEAD
14000 MANGANESE

MG/KG ANALYTICAL RESULTS

0.13U MERCURY
0.98UJ SELENIUM
1.2UJ SILVER
0.49U THALLIUM
NA TIN
23 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
*** ** ** ** **
** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-05 COLLECTION START: 02/26/92 1755 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL64 MD NO: CL64 **
** ** ** **
```

RESULTS UNITS PARAMETER
6.30 MG/KG CYANIDE

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL65 **
**

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7.4UR	ANTIMONY	0.11U	MERCURY
		1.2UJ	SILVER
		0.49U	THALLIUM
		NA	TIN
		3.0U	
		21	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL65 MD NO: CL65 **
**
*** **
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RESULTS UNITS PARAMETER
6.1U MG/KG CYANIDE

FOOTNOTES

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Spike?

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65472 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-07 COLLECTION START: 02/27/92 1900 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL54 **
**

MG/KG ANALYTICAL RESULTS

6.40U ANTIMONY
0.21U BERYLLIUM
0.21U CADMIUM
19U CALCIUM
0.62U COBALT
20U MAGNESIUM

MG/KG ANALYTICAL RESULTS

0.11U MERCURY
0.83U NICKEL
0.85U SELENIUM
1U SILVER
0.43U THALLIUM
NA TIN
4U TUNGSTOM
10 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65472 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-07 COLLECTION START: 02/27/92 1900 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL54 MD NO: CL54 **
**

RESULTS UNITS PARAMETER
5.5U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65462 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-01 COLLECTION START: 02/26/92 0940 STOP: 00/00/00 **
**
** CASE NO.: 17847 SAS NO.: D. NO.: CL56 **
*** **

UG/KG ANALYTICAL RESULTS

14U	CHLOROMETHANE
14U	BROMOMETHANE
14U	VINYL CHLORIDE
14U	CHLOROETHANE
30U	METHYLENE CHLORIDE
14U	ACETONE
14U	CARBON DISULFIDE
14U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
14U	1,1-DICHLOROETHANE
14U	1,2-DICHLOROETHENE (TOTAL)
14U	CHLOROFORM
14U	1,2-DICHLOROETHANE
14U	METHYL ETHYL KETONE
14U	1,1,1-TRICHLOROETHANE
14U	CARBON TETRACHLORIDE
14U	BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

14U	1,2-DICHLOROPROPANE
14U	CIS-1,3-DICHLOROPROPENE
14U	TRICHLOROETHENE(TRICHLOROETHYLENE)
14U	DIBROMOCHLOROMETHANE
14U	1,1,2-TRICHLOROETHANE
14U	BENZENE
14U	TRANS-1,3-DICHLOROPROPENE
14U	BROMOFORM
14U	METHYL ISOBUTYL KETONE
14U	METHYL BUTYL KETONE
14U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
14U	1,1,2,2-TETRACHLOROETHANE
14U	TOLUENE
14U	CHLOROBENZENE
14U	ETHYL BENZENE
14U	STYRENE
14U	TOTAL XYLENES
26	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

04/13/92

***** PROJECT NO. 92-0331 SAMPLE NO. 65462 SAMPLE TYPE: SOIL *****
 SOURCE: SIMMONS CASKET CO
 STATION ID: SS-01
 PROG ELEM: NSF
 CITY: LANCASTER
 COLLECTION START: 02/26/92 0940 STOP: 00/00/00
 COLLECTED BY: B STAFFORD
 ST: KY

ANALYTICAL RESULTS		ANALYTICAL RESULTS	
UG/KG		UG/KG	
1	0.00	1	0.00
2	0.00	2	0.00
3	0.00	3	0.00
4	0.00	4	0.00
5	0.00	5	0.00
6	0.00	6	0.00
7	0.00	7	0.00
8	0.00	8	0.00
9	0.00	9	0.00
10	0.00	10	0.00
11	0.00	11	0.00
12	0.00	12	0.00
13	0.00	13	0.00
14	0.00	14	0.00
15	0.00	15	0.00
16	0.00	16	0.00
17	0.00	17	0.00
18	0.00	18	0.00
19	0.00	19	0.00
20	0.00	20	0.00
21	0.00	21	0.00
22	0.00	22	0.00
23	0.00	23	0.00
24	0.00	24	0.00
25	0.00	25	0.00
26	0.00	26	0.00
27	0.00	27	0.00
28	0.00	28	0.00
29	0.00	29	0.00
30	0.00	30	0.00
31	0.00	31	0.00
32	0.00	32	0.00
33	0.00	33	0.00
34	0.00	34	0.00
35	0.00	35	0.00
36	0.00	36	0.00
37	0.00	37	0.00
38	0.00	38	0.00
39	0.00	39	0.00
40	0.00	40	0.00
41	0.00	41	0.00
42	0.00	42	0.00
43	0.00	43	0.00
44	0.00	44	0.00
45	0.00	45	0.00
46	0.00	46	0.00
47	0.00	47	0.00
48	0.00	48	0.00
49	0.00	49	0.00
50	0.00	50	0.00
51	0.00	51	0.00
52	0.00	52	0.00
53	0.00	53	0.00
54	0.00	54	0.00
55	0.00	55	0.00
56	0.00	56	0.00
57	0.00	57	0.00
58	0.00	58	0.00
59	0.00	59	0.00
60	0.00	60	0.00
61	0.00	61	0.00
62	0.00	62	0.00
63	0.00	63	0.00
64	0.00	64	0.00
65	0.00	65	0.00
66	0.00	66	0.00
67	0.00	67	0.00
68	0.00	68	0.00
69	0.00	69	0.00
70	0.00	70	0.00
71	0.00	71	0.00
72	0.00	72	0.00
73	0.00	73	0.00
74	0.00	74	0.00
75	0.00	75	0.00
76	0.00	76	0.00
77	0.00	77	0.00
78	0.00	78	0.00
79	0.00	79	0.00
80	0.00	80	0.00
81	0.00	81	0.00
82	0.00	82	0.00
83	0.00	83	0.00
84	0.00	84	0.00
85	0.00	85	0.00
86	0.00	86	0.00
87	0.00	87	0.00
88	0.00	88	0.00
89	0.00	89	0.00
90	0.00	90	0.00
91	0.00	91	0.00
92	0.00	92	0.00
93	0.00	93	0.00
94	0.00	94	0.

440UJ BIS(2-CHLOROETHYL) ETHER
440UJ ACENAPHTHENE
440UJ ACENAPHTHENE
440UJ ACENAPHTHENE

4400J 1,4-DICHLOROBENZENE
4400J 1,3-DICHLOROBENZENE
4400J 1,2-DICHLOROBENZENE
4400J 1,4-DIBENZOFURAN
4400J 1,3-DIBENZOFURAN
4400J 1,2-DIBENZOFURAN

[illegible][illegible]

440UJ ISOPHORONE
440UJ 4-BROMOPHENYL PHENYL ETHER

4400JJ Z,4-DIMETHYLPHENOL
4400JJ BIS(2-CHLOROETHOXY) METHANE
4400JJ PHENANTHRENE
4400JJ FLUOROPHENOL
4400JJ FLUOROPHENOL

1,2,4-TRICHLOROBENZENE
440UJ
NAPHTHALENE
440UJ
NAPHTHALENE
440UJ
CARBAZOLE
440UJ
DITHIALE
440UJ
DITHIALE
440UJ

440UJ HEXACHLOROBUTADIENE
440UJ PYRENE
CULTURAL STATE

4400UJ
4400UJ
HEXACHLOROCYCLOPENTADIENE (HCCP)
Z-METHYL ENARITHRAKENE
BENZOPHENANTHRENE
4400UJ
4400UJ
BENZO(A)ANTHRACENE
G-UNIONERODICILININE

1100UJ
1100VJ
2-CHLORONADPHENYL
2,4,5-TRICHLOROPHENOL
440QJ
440QJ
BIS(2-ETHYLBENZYL) PHthalate
BT-N-OCTYL PHTHALATE

440UJ	DIMETHYL PHTHALATE	440UJ	BENZO-A-PYRENE
440UJ <td>6-CYANODINITRILE <td>440UJ <td>INDENO (1,2,3-CD) PYRENE </td></td></td>	6-CYANODINITRILE <td>440UJ <td>INDENO (1,2,3-CD) PYRENE </td></td>	440UJ <td>INDENO (1,2,3-CD) PYRENE </td>	INDENO (1,2,3-CD) PYRENE
440UJ <td>INDENO (1,2,3-CD) PYRENE <td>440UJ <td>INDENO (1,2,3-CD) PYRENE </td></td></td>	INDENO (1,2,3-CD) PYRENE <td>440UJ <td>INDENO (1,2,3-CD) PYRENE </td></td>	440UJ <td>INDENO (1,2,3-CD) PYRENE </td>	INDENO (1,2,3-CD) PYRENE

4400J BENZO(GHI)PERYLENE

EXCESSIVE HOLDING TIME

1000

*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

*K-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65462 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: 55-01
*** CASE NUMBER: 17847 SAS NUMBER:

*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER
*** COLLECTION START: 02/26/92 0940 STOP: 00/00/00
*** D. NUMBER: CL56

UG/KG ANALYTICAL RESULTS

UG/KG ANALYTICAL RESULTS

2.3U ALPHA-BHC
2.3U BETA-BHC
2.3U DELTA-BHC
2.3U GAMMA-BHC (LINDANE)
2.3U HEPTACHLOR
2.3U ALDRIN
2.3U HEPTACHLOR EPOXIDE
2.3U ENDOSULFAN I (ALPHA)
4.5U DIELDRIN
4.5U 4,4'-DDE (P,P'-DDE)
4.5U ENDRIN
4.5U ENDOSULFAN II (BETA)
4.5U 4,4'-DDD (P,P'-DDD)
4.5U ENDOSULFAN SULFATE
4.5U 4,4'-DDT (P,P'-DDT)

23U METHOXYCHLOR
4.5U ENDRIN KETONE
4.5U ENDRIN ALDEHYDE
2.3U CHLORDANE (TECH. MIXTURE) /1
2.3U GAMMA-CHLORDANE /2
230U ALPHA-CHLORDANE
230U TOXAPHENE
45U PCB-1016 (AROCOR 1016)
90U PCB-1221 (AROCOR 1221)
45U PCB-1232 (AROCOR 1232)
45U PCB-1242 (AROCOR 1242)
45U PCB-1248 (AROCOR 1248)
45U PCB-1254 (AROCOR 1254)
45U PCB-1260 (AROCOR 1260)
26 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **
**
** CASE NO.: 17847 SAS NO.: D. NO.: CL61 **

UG/KG ANALYTICAL RESULTS

15U CHLOROMETHANE
15U BROMOMETHANE
15U VINYL CHLORIDE
15U CHLOROETHANE
20U METHYLENE CHLORIDE
15U ACETONE
15U CARBON DISULFIDE
15U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
15U 1,1-DICHLOROETHANE
15U 1,2-DICHLOROETHENE (TOTAL)
15U CHLOROFORM
15U 1,2-DICHLOROETHANE
15U METHYL ETHYL KETONE
15U 1,1,1-TRICHLOROETHANE
15U CARBON TETRACHLORIDE
15U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

15U 1,2-DICHLOROPROPANE
15U CIS-1,3-DICHLOROPROPENE
15U TRICHLOROETHENE(TRICHLOROETHYLENE)
15U DIBROMOCHLOROMETHANE
15U 1,1,2-TRICHLOROETHANE
15U BENZENE
15U TRANS-1,3-DICHLOROPROPENE
15U BROMOFORM
15U METHYL ISOBUTYL KETONE
15U METHYL BUTYL KETONE
15U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
15U 1,1,2,2-TETRACHLOROETHANE
15U TOLUENE
15U CHLOROBENZENE
15U ETHYL BENZENE
15U STYRENE
15U TOTAL XYLENES
32 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **

*** CASE NO.: 17847 SAS NO.: D. NO.: CL61 ***

UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

490UJ [REDACTED] OL
490UJ BIS(2-CHLOROETHYL) ETHER
490UJ 2-CHLOROPHENOL
490UJ 1,3-DICHLOROBENZENE
490UJ 1,4-DICHLOROBENZENE
490UJ 1,2-DICHLOROBENZENE
490UJ [REDACTED] OL
490UJ 2,2'-CHLOROISOPROPYLETH
490UJ [REDACTED] OL
490UJ N-NITROSODI-N-PROPYLAMINE
490UJ HEXACHLOROETHANE
490UJ NITROBENZENE
490UJ ISOPHORONE
490UJ 2-NITROPHENOL
490UJ 2,4-DIMETHYLPHENOL
490UJ BIS(2-CHLOROETHOXY) METHANE
490UJ 2,4-DICHLOROPHENOL
490UJ 1,2,4-TRICHLOROBENZENE
490UJ NAPHTHALENE
490UJ 4-CHLOROANILINE
490UJ HEXACHLOROBUTADIENE
490UJ 4-CHLORO-3-METHYLPHENOL
490UJ 2-METHYLNAPHTHALENE
490UJ HEXACHLOROCYCLOPENTADIENE (HCCP)
490UJ 2,4,6-TRICHLOROPHENOL
1200UJ 2,4,5-TRICHLOROPHENOL
490UJ 2-CHLORONAPHTHALENE
1200UJ 2-NITROANILINE
490UJ DIMETHYL PHTHALATE
490UJ ACENAPHTHYLENE
490UJ 2,6-DINITROTOLUENE

1200UJ 3-NITROANILINE
490UJ ACENAPHTHENE
1200UJ 2,4-DINITROPHENOL
1200UJ 4-NITROPHENOL
490UJ DIBENZOFURAN
490UJ 2,4-DINITROTOLUENE
490UJ DIETHYL PHTHALATE
490UJ 4-CHLOROPHENYL PHENYL ETHER
490UJ FLUORENE
490UJ 4-NITROANILINE
490UJ 2-METHYL-4,6-DINITROPHENOL
490UJ N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
490UJ 4-BROMOPHENYL PHENYL ETHER
1200UJ HEXACHLOROBENZENE (HCB)
490UJ [REDACTED]
490UJ ANTHRACENE
490UJ CARBAZOLE
490UJ [REDACTED]
490UJ BENZYL BUTYL PHTHALATE
490UJ [REDACTED]
490UJ CHRYSENE
490UJ BIS(2-ETHYLHEXYL) PHTHALATE
490UJ [REDACTED]
490UJ BENZO(B AND/OR K)FLUORANTHENE
490UJ BENZO-A-PYRENE
490UJ INDENO (1,2,3-CD) PYRENE
490UJ DIBENZO(A,H)ANTHRACENE
490UJ BENZO(GH)PERYLENE
32 PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL61 MD NO: CL61 **
*** **

ANALYTICAL RESULTS UG/KG

1 [REDACTED] (3 ISOMERS)
[REDACTED]
[REDACTED] (3 ISOMERS)
30000 3 UNIDENTIFIED COMPOUNDS

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: 55-02
*** CASE NUMBER: 17847 SAS NUMBER:

*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER ST: KY
*** COLLECTION START: 02/26/92 1525 STOP: 00/00/00
*** D. NUMBER: CL61

UG/KG ANALYTICAL RESULTS

UG/KG ANALYTICAL RESULTS

120U ALPHA-BHC
120U BETA-BHC
120U DELTA-BHC
120U GAMMA-BHC (LINDANE)
120U HEPTACHLOR
120U ALDRIN
120U HEPTACHLOR EPOXIDE
120U ENDOSULFAN I (ALPHA)
240U DIELDRIN
240U 4,4'-DDE (P,P'-DDE)
240U ENDRIN
240U ENDOSULFAN II (BETA)
240U 4,4'-DDD (P,P'-DDD)
240U ENDOSULFAN SULFATE
240U 4,4'-DDT (P,P'-DDT)

1200U METHOXYCHLOR
240U ENDRIN KETONE
240U ENDRIN ALDEHYDE
120U CHLORDANE (TECH. MIXTURE) /1
120U GAMMA-CHLORDANE /2
1200U ALPHA-CHLORDANE
1200U TOXAPHENE
2400U PCB-1016 (AROCOR 1016)
4800U PCB-1221 (AROCOR 1221)
2400U PCB-1232 (AROCOR 1232)
2400U PCB-1242 (AROCOR 1242)
2400U PCB-1248 (AROCOR 1248)
2400U PCB-1254 (AROCOR 1254)
32 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *I-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
*C-CONFIRMED BY GCMS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-03 COLLECTION START: 02/26/92 1630 STOP: 00/00/00 **
**
** CASE NO.: 17847 SAS NO.: D. NO.: CL62 **
*** **

UG/KG ANALYTICAL RESULTS

13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
30U METHYLENE CHLORIDE
13U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13U 1,1,1-TRICHLOROETHANE
13U CARBON TETRACHLORIDE
13U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

13U 1,2-DICHLOROPROPANE
13U CIS-1,3-DICHLOROPROPENE
13U TRICHLOROETHENE(TRICHLOROETHYLENE)
13U DIBROMOCHLOROMETHANE
13U 1,1,2-TRICHLOROETHANE
13U BENZENE
13U TRANS-1,3-DICHLOROPROPENE
13U BROMOFORM
13U METHYL ISOBUTYL KETONE
13U METHYL BUTYL KETONE
13U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U 1,1,2,2-TETRACHLOROETHANE
13U TOLUENE
13U CHLOROBENZENE
13U ETHYL BENZENE
13U STYRENE
13U TOTAL XYLENES
25 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SS-03
*** COLLECTION START: 02/26/92 1630 STOP: 00/00/00

*** CASE NO. : 17847
*** SAS NO. :
*** D. NO. : CL62

ANALYTICAL RESULTS

ANALYTICAL RESULTS

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
4400J	BIS(2-CHLOROETHYL) ETHER	1100J	3-NITROANILINE
4400J	2-CHLOROPHENOL	4400J	ACENAPHTHENE
4400J	1,3-DICHLOROBENZENE	1100J	2,4-DINITROPHENOL
4400J	1,4-DICHLOROBENZENE	1100J	4-NITROPHENOL
4400J	1,2-DICHLOROBENZENE	4400J	DIBENZOFURAN
4400J	2-METHYLPHENOL	4400J	2,4-DINITROTOLUENE
4400J	2,2'-CHLOROISOPROPYLETHER	4400J	DIETHYL PHTHALATE
4400J	(3-AND/OR 4-)METHYLPHENOL	4400J	4-CHLOROPHENYL PHENYL ETHER
4400J	N-NITROSODI-N-PROPYLAMINE	4400J	FLUORENE
4400J	HEXACHLOROETHANE	1100J	4-NITROANILINE
4400J	NITROBENZENE	1100J	2-METHYL-4,6-DINITROPHENOL
4400J	ISOPHORONE	4400J	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
4400J	2-NITROPHENOL	4400J	4-BROMOPHENYL PHENYL ETHER
4400J	2,4-DIMETHYLPHENOL	1100J	HEXACHLOROBENZENE (HCB)
4400J	BIS(2-CHLOROETHOXY) METHANE	4400J	PENTACHLOROPHENOL
4400J	2,4-DICHLOROPHENOL	4400J	PHENANTHRENE
4400J	1,2,4-TRICHLOROBENZENE	4400J	ANTHRACENE
4400J	NAPHTHALENE	4400J	CARBAZOLE
4400J	4-CHLOROANILINE	4400J	DI-N-BUTYLPHTHALATE
4400J	HEXACHLOROBUTADIENE	4400J	FLUORANTHENE
4400J	4-CHLORO-3-METHYLPHENOL	4400J	PYRENE
4400J	2-METHYLNAPHTHALENE	4400J	BENZYL BUTYL PHTHALATE
4400J	HEXACHLOROCYCLOPENTADIENE (HCCP)	4400J	3,3'-DICHLOROBENZIDINE
1100J	2,4,6-TRICHLOROPHENOL	4400J	BENZO(A)ANTHRACENE
1100J	2,4,5-TRICHLOROPHENOL	4400J	CHRYSENE
1100J	2-CHLORONAPHTHALENE	4400J	BIS(2-ETHYLHEXYL) PHTHALATE
1100J	2-NITROANILINE	4400J	DI-N-OCTYLPHTHALATE
4400J	DIMETHYL PHTHALATE	4400J	BENZO(B AND/OR K)FLUORANTHENE
4400J	ACENAPHTHYLENE	4400J	BENZO-A-PYRENE
4400J	2,6-DINITROTOLUENE	4400J	INDENO (1,2,3-CD) PYRENE
		4400J	DIBENZO(A,H)ANTHRACENE
		4400J	BENZO(GH)PERYLENE
		25	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-03 COLLECTION START: 02/26/92 1630 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL62 MD NO: CL62 **
*** **

ANALYTICAL RESULTS UG/KG

400 mg/L INTERFERENCE (Q-100MENG)
200 mg/L INTERFERENCE (Q-100MENG)

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
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SAMPLE AND ANALYSTS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: 55-03
*** CASE NUMBER: 17847
*** SAS NUMBER: 17847

*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER ST: KY
*** COLLECTION START: 02/26/92 1630 STOP: 00/00/00
*** D. NUMBER: CL62

ANALYTICAL RESULTS

UG/KG

ANALYTICAL RESULTS

UG/KG

2.2U ALPHA-BHC
2.2U BETA-BHC
2.2U DELTA-BHC
2.2U GAMMA-BHC (LINDANE)
2.2U HEPTACHLOR
2.2U ALDRIN
2.2U HEPTACHLOR EPOXIDE
2.2U ENDOSULFAN I (ALPHA)
4.4U DIELDRIN
4.4U 4,4'-DDE (P,P'-DDE)
4.4U ENDRIN
4.4U ENDOSULFAN II (BETA)
4.4U 4,4'-DDD (P,P'-DDD)
4.4U ENDOSULFAN SULFATE
4.4U 4,4'-DDT (P,P'-DDT)

22U METHOXYCHLOR
4.4U ENDRIN KETONE
4.4U ENDRIN ALDEHYDE
2.2U CHLORDANE (TECH. MIXTURE) /1
2.2U ALPHA-CHLORDANE /2
220U TOXAPHENE
44U PCB-1016 (AROCOR 1016)
88U PCB-1221 (AROCOR 1221)
44U PCB-1232 (AROCOR 1232)
44U PCB-1242 (AROCOR 1242)
44U PCB-1248 (AROCOR 1248)
44U PCB-1254 (AROCOR 1254)
25 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-04 COLLECTION START: 02/26/92 1705 STOP: 00/00/00 **

** CASE NO.: 17847 SAS NO.: D. NO.: CL63 **

UG/KG ANALYTICAL RESULTS

13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
70U METHYLENE CHLORIDE
13U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13U 1,1,1-TRICHLOROETHANE
13U CARBON TETRACHLORIDE
13U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

13U 1,2-DICHLOROPROPANE
13U CIS-1,3-DICHLOROPROPENE
13U TRICHLOROETHENE(TRICHLOROETHYLENE)
13U DIBROMOCHLOROMETHANE
13U 1,1,2-TRICHLOROETHANE
13U BENZENE
13U TRANS-1,3-DICHLOROPROPENE
13U BROMOFORM
13U METHYL ISOBUTYL KETONE
13U METHYL BUTYL KETONE
13U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U 1,1,2,2-TETRACHLOROETHANE
13U TOLUENE
13U CHLOROBENZENE
13U ETHYL BENZENE
13U STYRENE
13U TOTAL XYLENES
23 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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04/13/92

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***** PROJECT NO. 92-031 SAMPLE NO. 65469 SAMPLE TYPE: SOIL *****  
***** SOURCE: SIMMONS CASKET CO *****  
***** STATION ID: SS-04 *****
```

PROG ELEM: NSF
CITY: LANCASTER
COLLECTION START: 02/26/92 1705 STOP: 00/00/00
ST: KY
COLLECTED BY: B STAFFORD

ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS	UG/KG
ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS	UG/KG

4300J ACENAPHTHENE
4300J ACENAPHTHENE
1100J 2,4-DINITROPHENOL
4300J BIS(2-CHLOROETHYL) ETHER
4300J 2-CHLOROPHENOL
4300J 2-CHLOROPHENOL

1,2-DICHLOROBENZENE
430UJ
430UJ
C-METHYLDURENOL
430UJ
2-NITROPHENOL
430UJ
1,2-DICHLOROBENZENE
430UJ
2,4-DINITROTOLUENE
430UJ
DIFLUORIDURALATE

N-NITROSODI-N-PROPYLAMINE
430UJ

N-NITROSDI-N-PROPYLENEAMINE
430UJ

DIETHYLAMINE
967UJ

DIMETHYLAMINE
800UJ

DIALLYLAMINE
1100UJ

4-NITROANILINE
1100UJ

TRIPROPYLMINE
967UJ

430UJ 2-NITROPHENOL
430UJ HEXACHLOROBENZENE (HCB)

4000J
2,3-DICHLOROBENZOL
1,2,4-TRICHLOROBENZENE
4300J
CARBAZOLE
4000J
CARBAZOLE

HEXACHLOROCYCLOPENTADIENE
4300J
4-CHLORO-3-METHYL PHENOL
430UJ

110011 3,4,5-TRICHLOROPHENOL
3,4,5-TRICHLOROPHENOL
2,4,6-TRICHLOROPHENOL
4300J CHRYSENE
4300J CHRYSENE

4300UJ	DIMETHYL PHTHALATE	4300UJ	ACENAPHTHYLENE	4300UJ	INDENO (1 2 3-CD) BENZO-A-PYRENE	4300UJ	INDENO (1 2 3-CD) BENZO-A-PYRENE	4300UJ	DVBENE
4300UJ	DIMETHYL PHTHALATE	4300UJ	ACENAPHTHYLENE	4300UJ	INDENO (1 2 3-CD) BENZO-A-PYRENE	4300UJ	INDENO (1 2 3-CD) BENZO-A-PYRENE	4300UJ	DVBENE

23 PERCENT MOISTURE

FOOTNOTES

**U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 **U-C INDICATES THAT DATA UNUSABLE MAY OR NOT BE DESCENT BECAUSING AND DEANALYSIS IS NECESSARY FOR VERIFICATION

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-04 COLLECTION START: 02/26/92 1705 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL63 MD NO: CL63 **
*** **

ANALYTICAL RESULTS UG/KG

1000000
2000000
9000000
10000000 METHYLENEBISPHENOL (2 ISOMERS)

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL ***
 *** SOURCE: SIMMONS CASKET CO ***
 *** STATION ID: 55-04 ***
 *** CASE NUMBER: 17847 *** SAS NUMBER: ***

UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

2.4U ALPHA-BHC	24U METHOXYCHLOR
2.4U BETA-BHC	4.7U ENDRIK KETONE
2.4U DELTA-BHC	4.7U ENDRIK ALDEHYDE
2.4U GAMMA-BHC (LINDANE)	CHLORDANE (TECH. MIXTURE) /1
2.4U HEPTACHLOR	2.4U GAMMA-CHLORDANE /2
2.4U ALDRIN	24U ALPHA-CHLORDANE
2.4U HEPTACHLOR EPOXIDE	TOXAPHENE
2.4U ENDOSULFAN I (ALPHA)	PCB-1016 (AROCCLOR 1016)
4.7U DIELDRIN	94U PCB-1221 (AROCCLOR 1221)
4.7U 4,4'-DDE (P,P'-DDE)	47U PCB-1232 (AROCCLOR 1232)
4.7U ENDRIK	47U PCB-1242 (AROCCLOR 1242)
4.7U ENDOSULFAN II (BETA)	47U PCB-1248 (AROCCLOR 1248)
4.7U 4,4'-DDD (P,P'-DDD)	47U PCB-1254 (AROCCLOR 1254)
4.7U ENDOSULFAN SULFATE	47U PCB-1260 (AROCCLOR 1260)
4.7U 4,4'-DDT (P,P'-DDT)	31 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-05 COLLECTION START: 02/26/92 1755 STOP: 00/00/00 **
**
** CASE NO.: 17847 SAS NO.: D. NO.: CL64 **
*** **

UG/KG ANALYTICAL RESULTS

13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
70U METHYLENE CHLORIDE
13U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13U 1,1,1-TRICHLOROETHANE
13U CARBON TETRACHLORIDE
13U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

13U 1,2-DICHLOROPROPANE
13U CIS-1,3-DICHLOROPROPENE
13U TRICHLOROETHENE(TRICHLOROETHYLENE)
13U DIBROMOCHLOROMETHANE
13U 1,1,2-TRICHLOROETHANE
13U BENZENE
13U TRANS-1,3-DICHLOROPROPENE
13U BROMOFORM
13U METHYL ISOBUTYL KETONE
13U METHYL BUTYL KETONE
13U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U 1,1,2,2-TETRACHLOROETHANE
13U TOLUENE
13U CHLOROBENZENE
13U ETHYL BENZENE
13U STYRENE
13U TOTAL XYLENES
22 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL
** SOURCE: SIMMONS CASKET CO
** STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 1755 STOP: 00/00/00

CASE NO.: 17947

SAS NO.:

D. NO.: CL64

UG/KG ANALYTICAL RESULTS

UG/KG

ANALYTICAL RESULTS

420UJ BIS(2-CHLOROETHYL) ETHER
420UJ 2-CHLOROPHENOL
420UJ 1,3-DICHLOROBENZENE
420UJ 1,4-DICHLOROBENZENE
420UJ 1,2-DICHLOROBENZENE
420UJ 2,2'-CHLOROISOPROPYLETH
420UJ N-NITROSODI-N-PROPYLAMINE
420UJ HEXACHLOROETHANE
420UJ NITROBENZENE
420UJ ISOPHORONE
420UJ 2-NITROPHENOL
420UJ 2,4-DIMETHYLPHENOL
420UJ BIS(2-CHLOROETHOXY) METHANE
420UJ 2,4-DICHLOROPHENOL
420UJ 1,2,4-TRICHLOROBENZENE
420UJ NAPHTHALENE
420UJ 4-CHLORANILINE
420UJ HEXACHLOROBUTADIENE
420UJ 4-CHLORO-3-METHYLPHENOL
420UJ 2-METHYLNAPHTHALENE
420UJ HEXACHLOROCYCLOPENTADIENE (HCCP)
420UJ 2,4,6-TRICHLOROPHENOL
420UJ 2,4,5-TRICHLOROPHENOL
420UJ 2-CHLORONAPHTHALENE
1100UJ 2-NITROANILINE
420UJ DIMETHYL PHTHALATE
420UJ ACENAPHTHYLENE
420UJ 2,6-DINITROTOLUENE

1100UJ 3-NITROANILINE
420UJ ACENAPHTHENE
1100UJ 2,4-DINITROPHENOL
1100UJ 4-NITROPHENOL
420UJ DIBENZOFURAN
420UJ 2,4-DINITROTOLUENE
420UJ DIETHYL PHTHALATE
420UJ 4-CHLOROPHENYL PHENYL ETHER
420UJ FLUORENE
1100UJ 4-NITROANILINE
1100UJ 2-METHYL-4,6-DINITROPHENOL
420UJ N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
420UJ 4-BROMOPHENYL PHENYL ETHER
420UJ HEXACHLOROBENZENE (HCB)
1100UJ PENTACHLOROPHENOL
420UJ PHENANTHRENE
420UJ ANTHRACENE
420UJ CARBAZOLE
420UJ DI-N-BUTYLPHTHALATE
420UJ FLUORANTHENE
420UJ PYRENE
420UJ 3,3'-DICHLOROBENZIDINE
420UJ BENZO(A)ANTHRACENE
420UJ CHRYSENE
420UJ BIS(2-ETHYLHEXYL) PHTHALATE
420UJ DI-N-OCTYLPHTHALATE
420UJ BENZO(B AND/OR K)FLUORANTHENE
420UJ BENZO-A-PYRENE
420UJ INDENO (1,2,3-CD) PYRENE
420UJ DIBENZO(A,H)ANTHRACENE
420UJ BENZO(GH)PERYLENE
22 PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAT-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

04/13/92

```

***
** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY
** STATION ID: SS-05 COLLECTION START: 02/26/92 1755 STOP: 00/00/00
** CASE NO.: 17847 SAS NO.: D. NO.: CL64 MD NO: CL64
**
***

```

~~SECRET~~

REMARKS

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL ***
 *** SOURCE: SIMMONS CASKET CO ***
 *** STATION ID: SS-05 ***
 *** CASE NUMBER: 17847 ***
 *** SAS NUMBER: ***
 *** PROG ELEM: NSF COLLECTED BY: B STAFFORD ***
 *** CITY: LANCASTER ST: KY ***
 *** COLLECTION START: 02/26/92 1755 STOP: 00/00/00 ***
 *** D. NUMBER: CL64 ***

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2.1U	ALPHA-BHC	21U	METHOXYCHLOR
2.1U	BETA-BHC	4.3U	ENDRIN KETONE
2.1U	DELTA-BHC	4.3U	ENDRIN ALDEHYDE
2.1U	GAMMA-BHC (LINDANE)	2.1U	CHLORDANE (TECH. MIXTURE) /1
2.1U	HEPTACHLOR	2.1U	GAMMA-CHLORDANE /2
2.1U	ALDRIN	2.1U	ALPHA-CHLORDANE /2
2.1U	HEPTACHLOR EPOXIDE	210U	TOXAPHENE
2.1U	ENDOSULFAN I (ALPHA)	43U	PCB-1016 (AROCLOR 1016)
4.3U	DIELDRIN	85U	PCB-1221 (AROCLOR 1221)
4.3U	4,4'-DDE (P,P'-DDE)	43U	PCB-1232 (AROCLOR 1232)
4.3U	ENDRIN	43U	PCB-1242 (AROCLOR 1242)
4.3U	ENDOSULFAN II (BETA)	43U	PCB-1248 (AROCLOR 1248)
4.3U	4,4'-DDD (P,P'-DDD)	43U	PCB-1254 (AROCLOR 1254)
4.3U	ENDOSULFAN SULFATE	43U	PCB-1260 (AROCLOR 1260)
4.3U	4,4'-DDT (P,P'-DDT)	22	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAT-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** **

** CASE NO.: 17847 SAS NO.: D. NO.: CL65 **
*** **

UG/KG ANALYTICAL RESULTS

11U CHLOROMETHANE
11U BROMOMETHANE
11U VINYL CHLORIDE
11U CHLOROETHANE
40U METHYLENE CHLORIDE
40U ACETONE
11U CARBON DISULFIDE
11U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
11U 1,1-DICHLOROETHANE
11U 1,2-DICHLOROETHENE (TOTAL)
11U CHLOROFORM
11U 1,2-DICHLOROETHANE
11U METHYL ETHYL KETONE
11U 1,1,1-TRICHLOROETHANE
11U CARBON TETRACHLORIDE
11U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

11U 1,2-DICHLOROPROPANE
11U CIS-1,3-DICHLOROPROPENE
11U TRICHLOROETHENE(TRICHLOROETHYLENE)
11U DIBROMOCHLOROMETHANE
11U 1,1,2-TRICHLOROETHANE
11U BENZENE
11U TRANS-1,3-DICHLOROPROPENE
11U BROMOFORM
11U METHYL ISOBUTYL KETONE
11U METHYL BUTYL KETONE
11U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
11U 1,1,2,2-TETRACHLOROETHANE
11U TOLUENE
11U CHLOROBENZENE
11U ETHYL BENZENE
11U STYRENE
11U TOTAL XYLENES
12 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL65 MD NO: CL65 **
*** **

ANALYTICAL RESULTS UG/KG

7. IN. [REDACTED]
8. IN. [REDACTED]
10. IN. [REDACTED]
50. IN. [REDACTED]
100. IN. [REDACTED]

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

*** EXTRACTABLE ORGANICS DATA REPORT ***
*** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL ***
*** SOURCE: SIMMONS CASKET CO ***
*** STATION ID: 55-06 ***
*** CASE NO.: 17847 ***
*** UG/KG ***
*** ANALYTICAL RESULTS ***
*** SAS NO.: ***
*** D. NO.: CL65 ***
*** UG/KG ***
*** ANALYTICAL RESULTS ***

380UJ	PHENOL	950UJ	3-NITROANILINE
380UJ	BIS(2-CHLOROETHYL) ETHER	380UJ	ACENAPHTHENE
380UJ	2-CHLOROPHENOL	950UJ	2,4-DINITROPHENOL
380UJ	1,3-DICHLOROBENZENE	950UJ	4-NITROPHENOL
380UJ	1,4-DICHLOROBENZENE	380UJ	DIBENZOFURAN
380UJ	1,2-DICHLOROBENZENE	380UJ	2,4-DINITROTOLUENE
380UJ	2-METHYLPHENOL	380UJ	DIETHYL PHTHALATE
380UJ	2,2'-CHLOROISOPROPYLETHETER	380UJ	4-CHLOROPHENYL PHENYL ETHER
380UJ	(3-AND/OR 4-)METHYLPHENOL	380UJ	FLUORENE
380UJ	N-NITROSODI-N-PROPYLAMINE	950UJ	4-NITROANILINE
380UJ	HEXACHLOROETHANE	380UJ	2-METHYL-4,6-DINITROPHENOL
380UJ	NITROBENZENE	380UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380UJ	ISOPHORENE	380UJ	4-BROMOPHENYL PHENYL ETHER
380UJ	2-NITROPHENOL	950UJ	PENTACHLOROBENZENE (HCB)
380UJ	2,4-DIMETHYLPHENOL	380UJ	HEXACHLOROBENZENE (HCB)
380UJ	BIS(2-CHLOROETHOXY) METHANE	380UJ	PHENANTHRENE
380UJ	2,4-DICHLOROPHENOL	380UJ	ANTHRACENE
380UJ	1,2,4-TRICHLOROBENZENE	380UJ	CARBAZOLE
380UJ	NAPHTHALENE	380UJ	DI-N-BUTYL PHTHALATE
380UJ	4-CHLORANILINE	380UJ	FLUORANTHENE
380UJ	HEXACHLOROBUTADIENE	380UJ	PYRENE
380UJ	4-CHLORO-3-METHYLPHENOL	380UJ	BENZYL BUTYL PHTHALATE
380UJ	2-METHYLNAPHTHALENE	380UJ	3,3'-DICHLOROBENZIDINE
380UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)	380UJ	BENZO(A)ANTHRACENE
950UJ	2,4,6-TRICHLOROPHENOL	380UJ	CHRYSENE
380UJ	2,4,5-TRICHLOROPHENOL	380UJ	BIS(2-ETHYLHEXYL) PHTHALATE
380UJ	2-CHLORONAPHTHALENE	380UJ	DI-N-OCTYL PHTHALATE
950UJ	2-NITROANILINE	380UJ	BENZO(B AND/OR K)FLUORANTHENE
380UJ	DIMETHYL PHTHALATE	380UJ	BENZO-A-PYRENE
380UJ	ACENAPHTHYLENE	380UJ	INDENO (1,2,3-CD) PYRENE
380UJ	2,6-DINITROTOLUENE	380UJ	DIBENZO(A,H)ANTHRACENE
		380UJ	BENZO(GHI)PERYLENE
		12	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL65 MD NO: CL65 **
** **

ANALYTICAL RESULTS UG/KG

~~XX~~
~~XX~~
~~XX~~

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL
SOURCE: SIMMONS CASKET CO
STATION ID: SS-06
CASE NUMBER: 17847

SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 1820 STOP: 00/00/00
D. NUMBER: CL65

UG/KG ANALYTICAL RESULTS

UG/KG ANALYTICAL RESULTS

1.8U	ALPHA-BHC	1.8U	METHOXYCHLOR
1.8U	BETA-BHC	3.7U	ENDRIN KETONE
1.8U	DELTA-BHC	3.7U	ENDRIN ALDEHYDE
1.8U	GAMMA-BHC (LINDANE)	1.8U	CHLORDANE (TECH. MIXTURE) /1
1.8U	HEPTACHLOR	1.8U	GAMMA-CHLORDANE /2
1.8U	ALDRIN	180U	ALPHA-CHLORDANE
1.8U	HEPTACHLOR EPOXIDE	37U	TOXAPHENE
1.8U	ENDOSULFAN I (ALPHA)	37U	PCB-1016 (AROCOR 1016)
3.7U	DIELDRIN	74U	PCB-1221 (AROCOR 1221)
3.7U	4,4'-DDE (P,P'-DDE)	37U	PCB-1232 (AROCOR 1232)
3.7U	ENDRIN	37U	PCB-1242 (AROCOR 1242)
3.7U	ENDOSULFAN II (BETA)	37U	PCB-1248 (AROCOR 1248)
3.7U	4,4'-DDD (P,P'-DDD)	37U	PCB-1254 (AROCOR 1254)
3.7U	ENDOSULFAN SULFATE	37U	PCB-1260 (AROCOR 1260)
3.7U	4,4'-DDT (P,P'-DDT)	12	PERCENT MOISTURE

REMARKS

REMARKS

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APPENDIX C

Photo Documentation Log

UNSCANNABLE

MEDIA

(PHOTOGRAPHS)

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

TELEPHONE MEMORANDUM

U.S. EPA Region IV
 Simmon's Casket Company
 Climate, Soil, and Private Well Information

BVWST Project 52011.020
 BVWST File
 July 14, 1992
 13:35

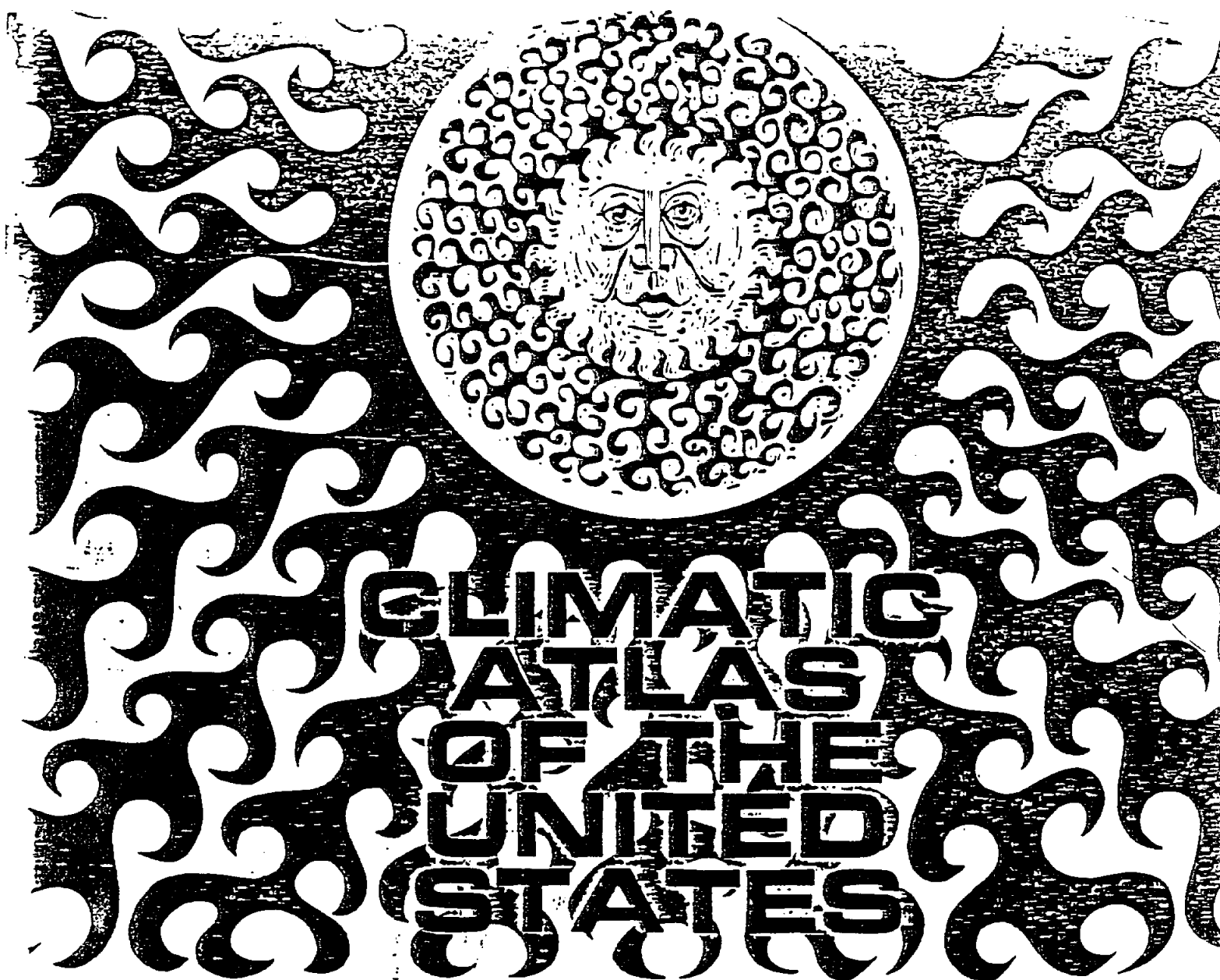
To: John Benson, Conservation Technician
 Company: Soil Conservation Service of Garrard County
 Phone No.: 606-792-2620

Recorded by: Carter Helm

I spoke to Mr. Benson, the Garrard County Soil Conservation Technician, to discuss a few key issues for the area that surrounds the facility below Lancaster, Kentucky. The Nicholson silt loam is the dominant soil type beneath and around Allison Abrasives. This soil type, part of the Lowell series, is characterized by: 2 to 6% slopes, high acidity, poor drainage, good tilth, and high errodibility.

Concerning area climate, Garrard County receives a net annual rainfall of 12 to 14 inches. Winters can be extremely cold, dry and windy where snowfalls are common. Summers are hot and humid with plenty of rain showers. The heavy precipitation is important to the area since residents not utilizing a municipal system typically use a cistern for their potable water. There are few private wells in the area; however, most are no longer in use except for possible irrigation.

The land that Allison Abrasives is located on is with the 100 year flood plan.



RCE . Environmental Science Services Administration . Environmental Data Service



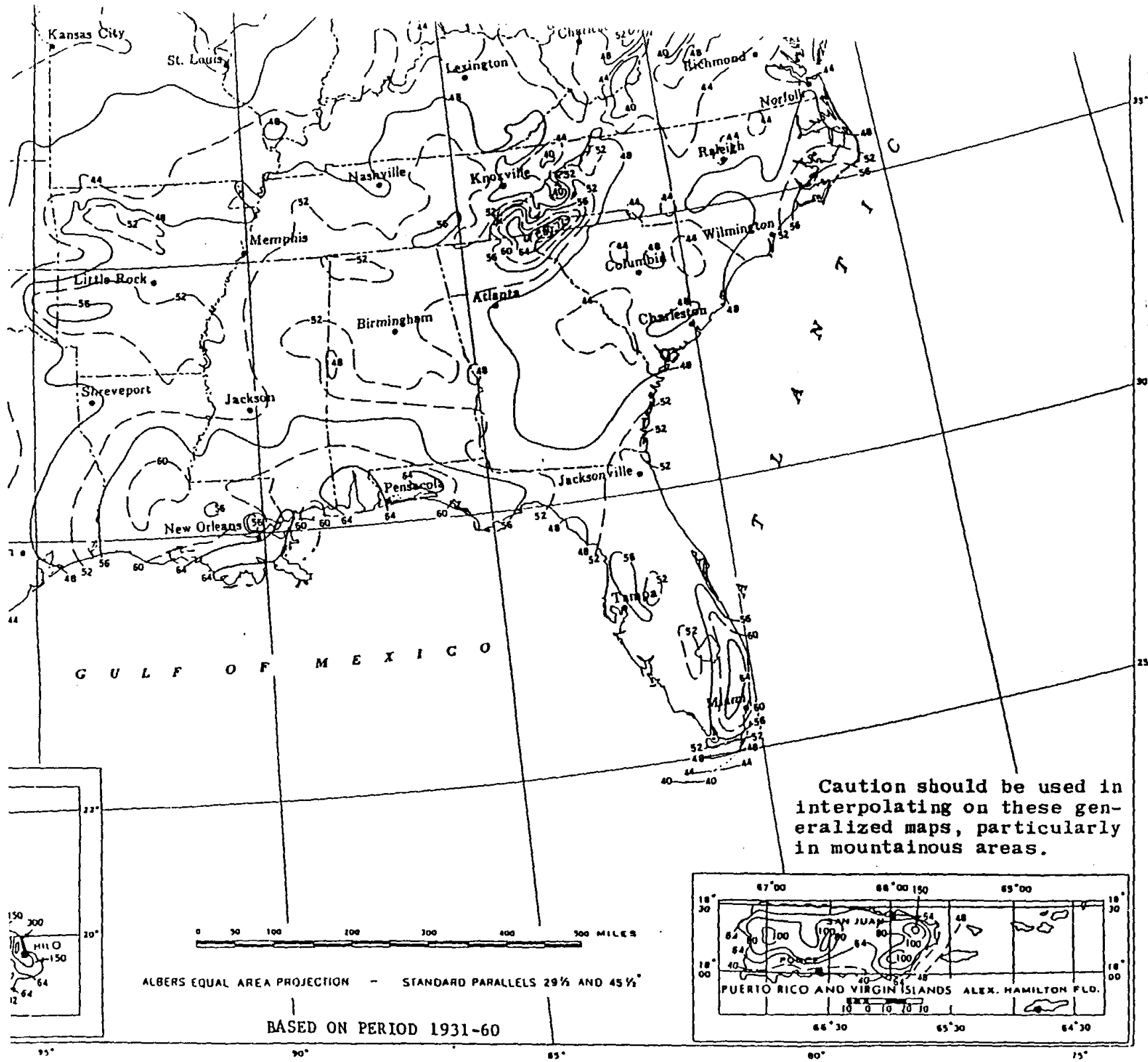
U.S. DEPARTMENT OF COMMERCE
C. R. Smith, Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
Robert M. White, Administrator

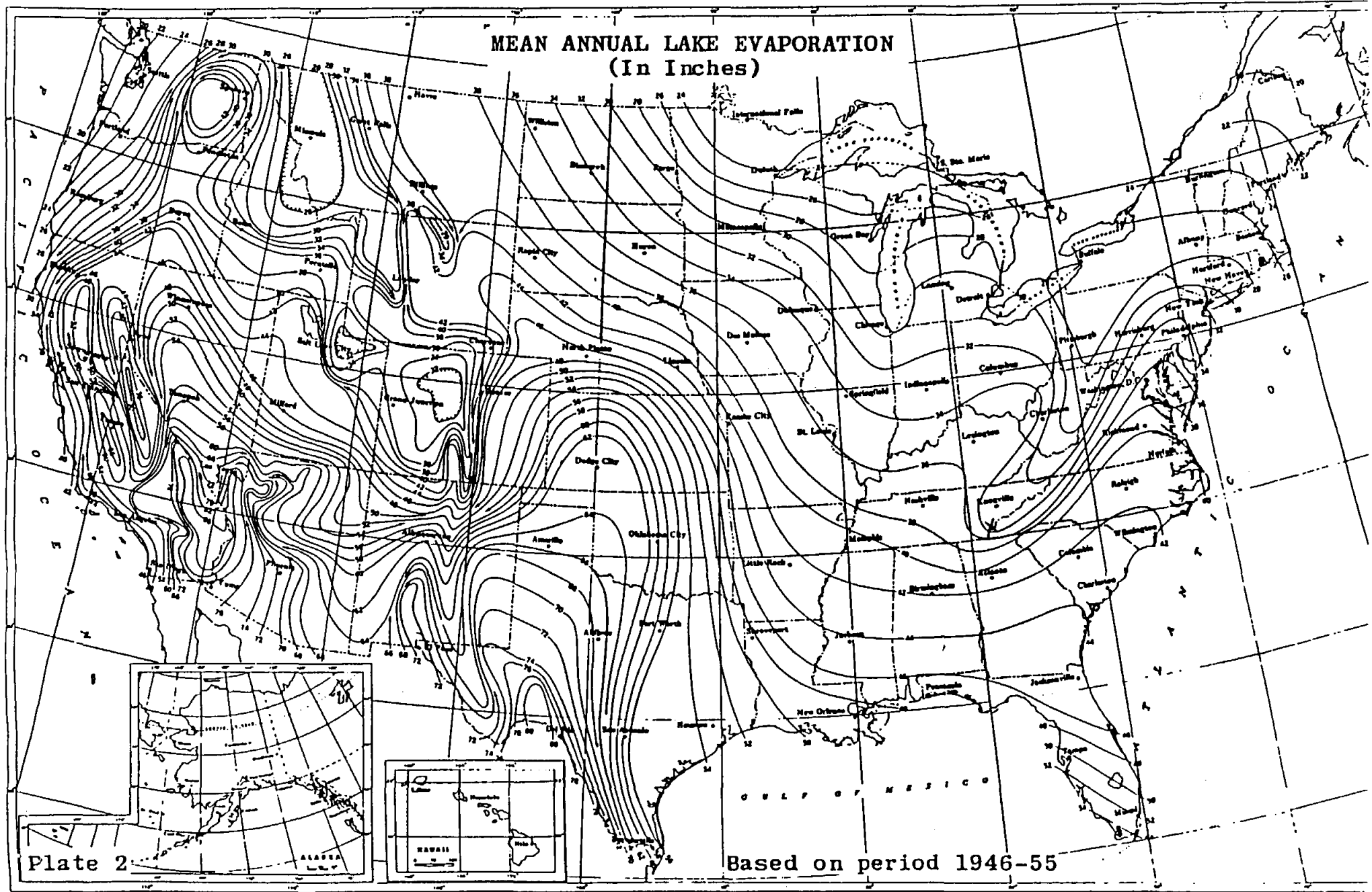
ENVIRONMENTAL DATA SERVICE
Woodrow C. Jacobs, Director

JUNE 1968

REPRINTED BY THE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
1983



LAKE EVAPORATION



DEPT OF COMMERCE
Secretary

WEATHER BUREAU
U. S. DEPARTMENT OF COMMERCE

TECHNICAL PAPER NO. 40

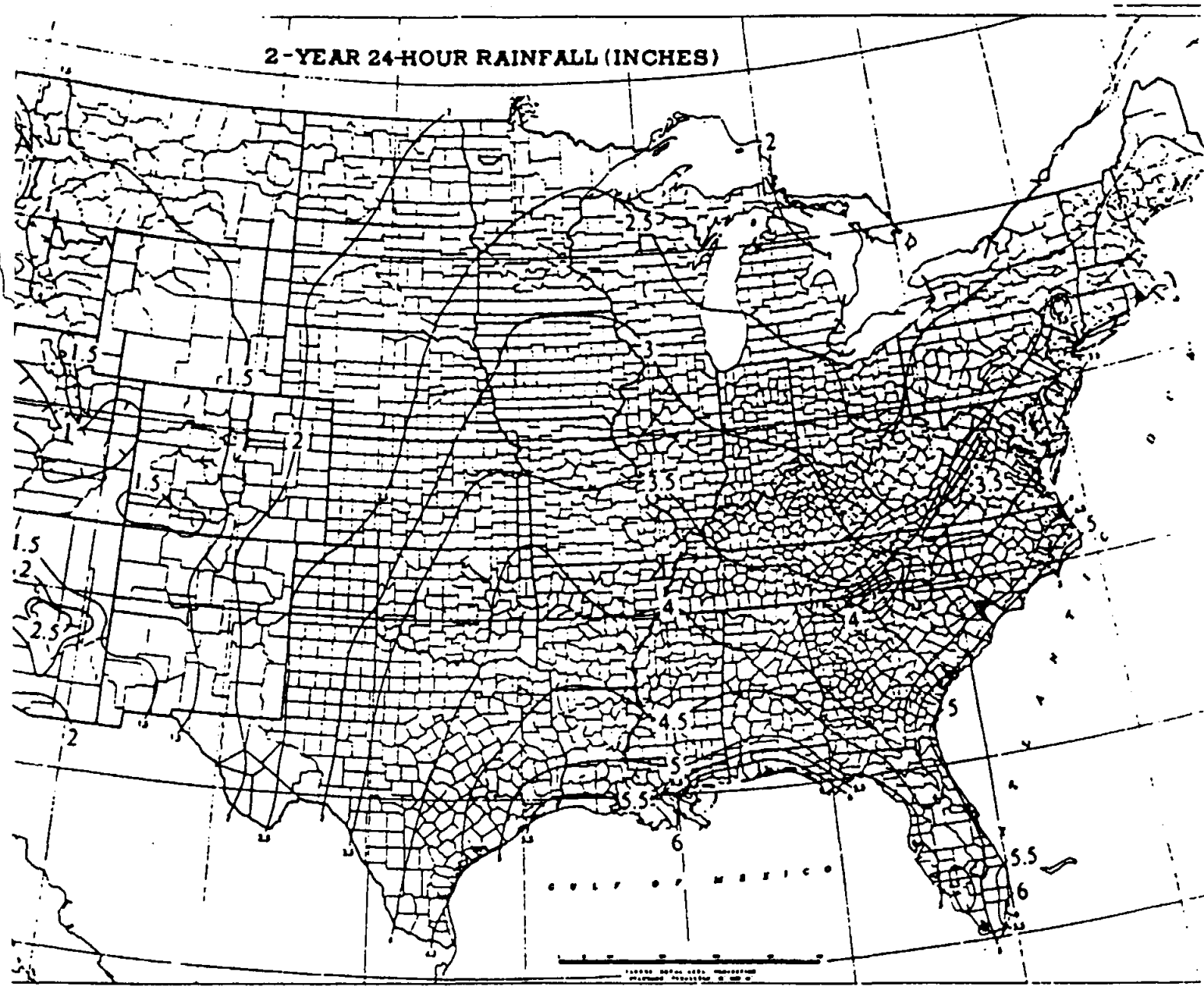
RAINFALL FREQUENCY ATLAS OF THE UNITED STATES
for Durations from 30 Minutes to 24 Hours and
Return Periods from 1 to 100 Years

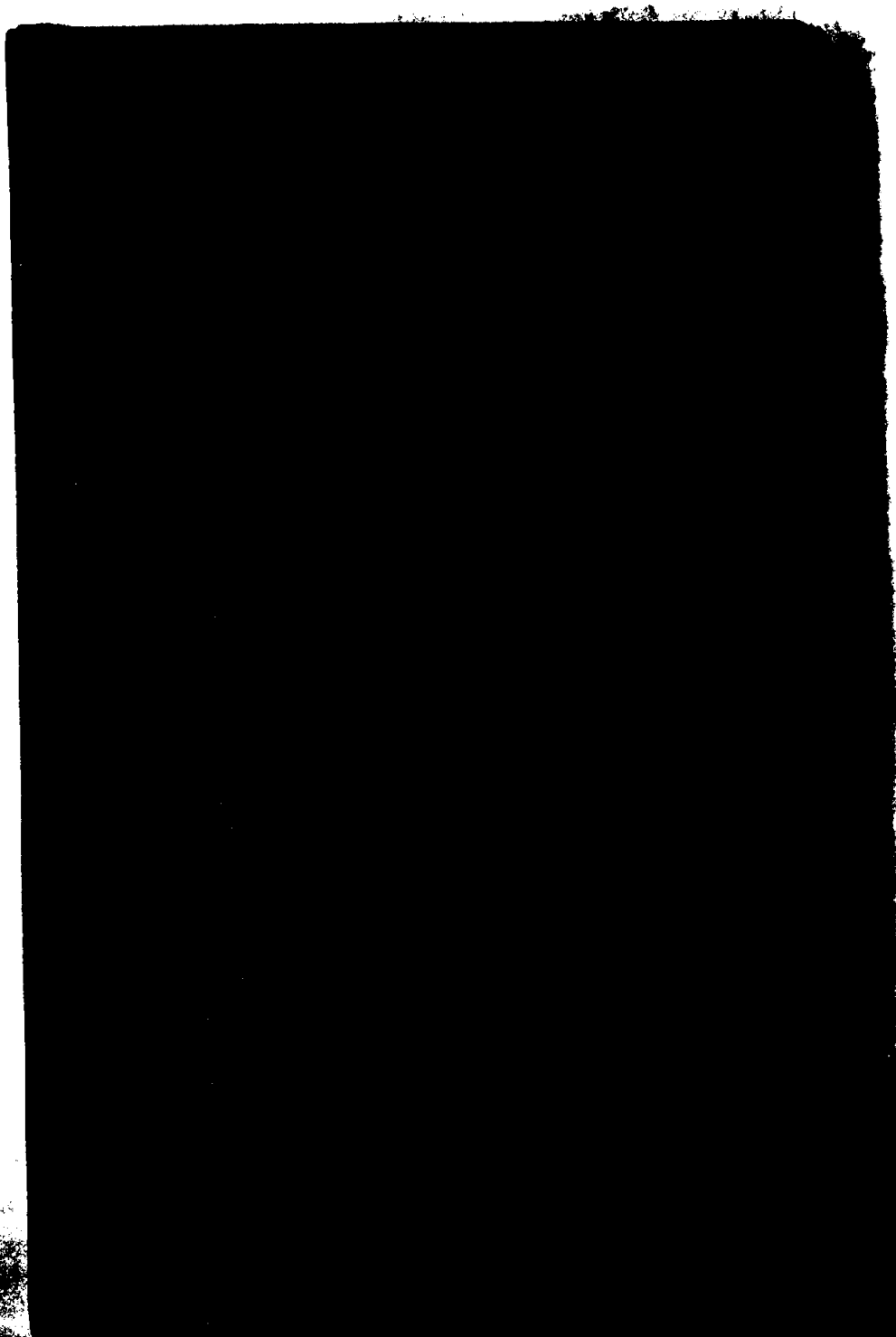
Prepared by
DAVID M. HENSHFIELD
(Cooperative Studies Section, Hydrologic Section, National
Engineering Division, South Construction Service
U. S. Department of Agriculture)



PROPERTY OF EPA
FIV

2-YEAR 24-HOUR RAINFALL (INCHES)

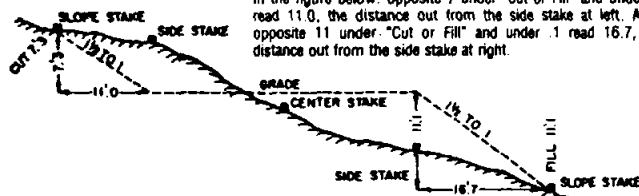




DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Distance out from Side or Shoulder Stake	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Distance out from Side or Shoulder Stake
0	0.0	0.2	0.3	0.5	0.8	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40



CARTER J. HELM,
Project manager

1117 Perimeter Center West
Suite W-212
Atlanta, Georgia 30338
(404) 392-9227

EPA Contract #
GS-W9-0055

BUWST Project No:
52011-020


Cerclis ID No.
KYD 050074889

The paper in this book is
made of 50% high grade rag stock with
a WATER RESISTING surface sizing.

[illegible]

①
C/S

We, the undersigned,
have read & understand
the Simmons Casket Co.
Field Sampling Plan and
Health & Safety Plan
issued for this site
and will follow guidelines
set forth. *[Signature]*


Carter J. Helms

Kevin Brown

Ker. n. Brown

Bill Stettin

Bill Stafford

(1)

2-25-92

~~all connections will be scratched out and initialed.~~

Note:
all connections will be scratched out and initialed.

8:45 Left Holiday Inn of Danville.

Cost Cost

(3)
CH.

2-25-92

09:45 Arrive at Allison Abrams plant

10:00 meeting with Lynn Osborne, plant manager
Mohammad Mohammadi, consultant
Brent Sears, plant engineer

We review study plan & discuss operations for the week

Note: We parked vehicles in SE corner of facility - Lynn Osborne said that it is a "clean" area where only hay was stored. Gravel parking area with no traffic or parked cars.

(4)

2-25-92

1986 - plant purchased
Oct. 1987 - production began

of employees = 75 people now
of acres = 49.2 buildings \approx 100,000 ft²
I requested copies of permits plus
list of chemicals used at plant.

draws still present = metal + fibers
3 UST were
removed 8/25/87
but inside of wall
contaminated.

current raw material = fiber =
storage
Alcoa
SiCabin

resin = metal = liquid

wasted generated ²⁰⁰⁰ Columbus, OH

Columbus steel drum
transporter & disposal

Note: Health & Safety Plan
numbers out for every
constituents or other percent

2-25-92

(5)

- small generator
v. limited waste produced.

- water from fire
prevention only.

Lancaster
city water sys }
161 Stanford St.

grain flour

- They want copies
of file withdrawn, I
told them to call
Caplan for permission.

8/4
10:40 - Caplan said to wait

till final study plan is
complete before release
This includes file material.

⑥ C 2-25-92

Allison ABRASIVES, INC.
Quality Abrasive Cut-Off Wheels Since 1919

Lynn Osborne
PLANT MANAGER

163 Industry Road
P.O. Box 192
Lancaster, Kentucky 40444
(606) 792-3033 Telex 93-9031
Fax 606-792-3118

Allison ABRASIVES, INC.
Quality Abrasive Cut-Off Wheels Since 1919

Brent Sears
PLANT ENGINEER

163 Industry Road
P.O. Box 192
Lancaster, Kentucky 40444
(606) 792-3033 Telex 93-9031
Fax (606) 792-3118



GeoSciences, Inc.
Engineering Consultants

Mohammad Mohammadi, Ph.D.
President

P.O. Box 40185 Baton Rouge, LA 70835
Tel: (504) 387-8778 Fax: (504) 387-8779

Allison Abrasives must file for
freedom of info act papers before
EPA file material is released 2-25-92

10.45 - outside town
w/ Lynn & Mohammad

E side: shinnel soil
vegetative stress
3 or 4 acres
affected

NE corner of
site - empty nested

55-gallon blue drum
lying w/ "Malter
Tower Tonic"

61089L

Note: Very obvious of recent
drum removal on E. side
- rings of dust/dirt/black material
are not yet washed off
concrete base - the property
is not fenced.

⑧

2-25-92

12:07 Kevin B. OVA
calibrates the

SN # 51634
128 GC

CH 3.0 span
for methane 100
span - 2.64

and 41549 HMK
model P1101

12:20 Rain starts.
Bill & Kevin go to
Lunch with
stand by. C.H.

2-25-92

⑨

1:10 Mohammed re-arrives
and we discuss plan, decided
to flag locations for samples
then if rain continues - which it
did - wrapped up decor
2:35 Dismissal given
2:50 Talked to Fred Simpson,

160 Superintendent for Lancaster Hobbits
- they call to Grand city & Orchard.
All 160 from Kentucky River
shole near sugarbeet (Sp.)

3:20 - Grand City H₂O & Assoc.
Leson Parsons, clerk

Tim Daly, 160 Service
they help outline computer 160 system
(see map.)

Rory sent me to Comb
Orchard for 160 into in
South Grand & N.M. Lincoln
Counties.

(10) C. 1st 2-25-92

also -

Leann Parsons states
There ~~are~~ not many wells
are in the area - if
people are not on
municipal sys, then they
have cisterns & not
wells.

wells occur in the
"Knobs" (SE Grand City).

Also new systems (lines)
are being installed
on Old Danville Rd &
Papenmill Rd.

Some wells are used for
irrigation.

2-25-92 (11) C. 1st

4:15: Talked to

Don Wexly and
Freeman Owens of

"Crab Orchard H₂O Dept."

(395 South in Crab O.)
~15 mi S of site;

(355-2319 or 355-2205
(home))

he assured me that his
H₂O system extends North
on rd 39 into Grand City up
to city limits of Lancaster. Also
up rd 642 to Dix River
(originating at rd 39)

(12) 11/11

2-25-92

4:35 Report Crab Orchard
4:50 Arrive at Holiday Inn
5:00 Called Officer

Note: See new Sample
Location map

2-26-92

(13)
CJH

700 - Go to Breakfast & over

0740 - Pelled Trip Blank for
H₂O off-site
TB-01

0805 arrive on site

Mohammed is already here

0815 Set up Recon &
paperwork table.

0830 Kevin calibrates
OVA SN# 51634
1286C
w/ methane 100 ppm.

SPM = 2.54

(14) 2/1/72

2-26-72

0930 at Ballground location

initial OVA = 0 ppm

BZM = 0 ppm

Moved 10 ft NE of sample

location: SS-01 to sample 0940
location: TW-01 - OVA = 0 ppm

SS-01 at 6 inches

10:00 TW-01 location

moved due to stagnant

20-surface drainage

that has crept into

shallon borehole

Mohammad brings it

to our attention

2-26-72

(15) 2/1/72

That the surface BZM will fall in the morning & not get 100% G-u test

a mix. This is recommended

by our locale & TW-01,

10 ft SW of SS-01

OVA ppm = 0 - BZM

after hand digging to 2 ft

below sand surface (see)

a stiff gray clay was encountered

and hand digging became impossible,

so we decide to use little

lessen hydraulic surge.

(16) ~~CJA~~

2-26-92

10:30 While trying to
drive Little Beaver down
to area of drilling, the
truck & trailer got stuck
in mud. We trep Allison's
gloss - but told consultant we
would repair it. We wheeled
Little Beaver down to T-01
and proceeded to drill
3-4 ft bbs, however, the
clay prevented further
advancement. No groundwater
sample will be taken
at Simmons Creek Co.

2-26-92

(17) ~~CJA~~

11:30 - Arrive at
background sediment
sample location
50 ft N of old railroad
in drainage stream

OLA reading = 1 ppm
on surface

- noticed a few percolation
holes in this surface water
drainage pathway, however,
a clear path of intermittent
stream / drainage does exist
and is up gradient of entire
site.

(1) (18) 2-26-72

The following pages will be logged by Kevin Brown
Signed: Kevin Brown

13:00

Sample location SD-02 located approx 150 ft north of Hwy 39 in drainage channel

OVA = 0 PPM

1340

Sample location SD-03
Drainage channel approx. 250' from Hwy. 39.
OVA = 0 PPM
This will be undrained duplicate,

1450

Sample location SD-04
Channel on east side of facility running east.

OVA = 0 PPM

2-26-72 (19)

1535

Sample location SS-02, 4" deep N.E. corner of building in old rail siding bed.
OVA = 0 PPM

— Just checked blackhead

none w/ OVA

= 0 ppm in 3 locations.

1630

Sample location SS-03, 4" in near dust collector
OVA = 0 PPM

1745 1755 (19)

Sample location SS-05
Near former drum storage
OVA = 0 PPM

(11) (20) 21/11

2-26-72

2-26-72

21/11

Note 5504 - collected at 1705 exit meeting: I told

them Osamu that if he

want the ~~book~~ ^{grass} replanted.

we will replant, however,

he stated "just leave"

the fire ditch we work

& his people will replant

some grass seed in the

spring.

18.00 Mohamad sighted
recept of camp (appts)
and departed the

13

Note 5504 - collected at 1705 exit meeting: I told

5506 - collected at 1820

2 in. - just below the
canopy of the dense
strange area - where
rings of debris are
present - evidence of
recent down removal
the soil is blackened
but rose on OVA.

No containment in east
seed plant

14

(11) (22) Cll 2-28-92

19:00 Sampling complete
- we pack up decor

20:00 ~~at car wash~~ Cll
Back at hotel

1.

14

2-27-92

(23)

0900. Prepare to ship
samples,
do paperwork, blanks
and spurs relabeled
& tagged.

Bill & Kevin help out

12:00 Bill & Kevin depart
hotel for Atlanta

3:30 I depart hotel
for Fed Ex, then
Atlanta -

CARL H. BRADLEY
SECRETARY



REFERENCE 5

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

October 12, 1990

Craig Benedikt
CERCLA PA/SI Regional Project Officer
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

RE: Preliminary Assessment (2)
Simmons Casket Company
Lancaster, Kentucky
EPA ID# KYD 050-074-889

Dear Mr. Benedikt:

Submitted for your review is the Preliminary Assessment (2) for the Simmons Casket Company. This report is intended to update the Preliminary Assessment dated 21 March, 1984. Based on this report the following conclusions are made:

1. Finishing wastes were generated at the site from 1965 to 1984.
2. Stained soil and unidentified drums were found on the east side of the facility during a site visit in October 1989.
3. There are approximately 1330 potential ground water users located within 4 miles of the site.

As a result of this reassessment, the Kentucky CERCLA PA/SI program is recommending that a high priority Site Screening Investigation be planned for the Simmons Casket Company site.

Sincerely,

A handwritten signature in cursive script, reading "Carl Millanti".

Carl Millanti, Manager
Uncontrolled Sites Branch

CM/CC/RP/kb

Preliminary Assessment (2)
of the former
Simmons Casket Company
Lancaster, Kentucky

by

Carolyn Clark
and
Robert Pugh

Uncontrolled Sites Section
Waste Management Division
Department for Environmental Protection
Commonwealth of Kentucky

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SITE HISTORY

The Simmon Casket Company is located in Lancaster, Garrard County, Kentucky. Wooden and metal (steel, copper, and bronze) caskets were produced at the site from 1965 to 1984. The National Casket Company operated the site followed by Simmons Casket Company, and then York Casket Company.

The first step of the manufacturing process consisted of welding the caskets together. The next step was a 3 stage washer system. The first washer contained a mixture of detergent, from the Dubose Chemical Company, and water. When this solution was spent, it was diluted with soda ash and dumped in the sewer. The other 2 washers contained only water. A concrete berm was located in the washer area to contain overflow from the washers.

The final manufacturing step involved painting and lacquering the caskets. There were 6 paint booths and 2 lacquer booths. A vat used for stripping paint and varnish was also located in the painting/varnishing area.

Paint thinner was the only solvent used at the facility according to a former employee. A small amount of paint thinner was placed on rags and used to wipe off excess paint when necessary. Paint thinner was also placed in the stripping vat.

Hazardous wastes generated at the facility (EPA ID# KYD 05-007-4889) were placed in drums and kept on site until being picked up by the Oil Service Co. of Columbia, KY and taken to Reclaimed Energy Inc. of Connersville, IN.

In 1984, operations at the site ceased. Several drums of waste remained on site until 1985. In 1987 the facility was sold to Allison Abrasives, Incorporated. The facility was renovated and several structural changes took place. The renovations included the removal of three underground storage tanks. No evidence of soil or groundwater contamination was detected. In October of 1987, operations at the facility began. Allison Abrasives produces abrasive wheels.

On October 27, 1989, the Kentucky Department of Waste Management CERCLA conducted a PA site visit at the facility. Several unidentified drums and stained soil were found on the east side of the plant. There was evidence of careless handling of drums (Appendix B).

ENVIRONMENTAL SETTING

The Simmons Casket Company site is located in Garrard County, Kentucky, a part of the outer Blue Grass Physiographic Region. The topography of this area is typically gently rolling hills. Sinkholes are not well developed in this area due to the restriction of groundwater circulation by shaly limestone (U.S.G.S. 1964).

The climate in Garrard County is moderate with warm summers and cool winters. The average annual precipitation is approximately 46 inches. The average annual net precipitation is approximately 11 inches (Appendix F).

The soil at the Simmons Casket Company site is classified as the Lowell series. This soil is typically residuum of interbedded limestone, calcareous shale, and siltstone. A representative profile is 11 inches of brown silt loam, 30 inches of brown, very firm clay and silty clay, followed by 12 inches of gray and yellowish brown mottled, very firm clay. The permeability ranges between 0.2 to 2.0 inches per hour. The pH of the soil

ranges between 4.5 to 7.8 (Appendix F).

The geological formation underlying the site is New Albany Shale of the Devonian Age. It is primarily composed of black shale with fine-grained quartz, crystalline pyrite, fine-grained material which is calcitic, phosphatic, ferric or organic. The New Albany Shale is underlain by Boyle Dolomite which is mostly dolomite and dolomitic limestone (U.S.G.S. 1971 and U.S.G.S. 1960).

Most drilled wells in the area of the Simmons Casket Company site do not produce enough water for a dependable domestic supply. Groundwater obtained from depths greater than 100 feet may contain salt or hydrogen sulfide (U.S.G.S. 1960).

Surface water at the site enters the Lancaster sewer system (Appendix A).

TARGET ANALYSIS

There is no quantitative data to support an air route assessment, therefore, the air route was not evaluated.

Access to the Simmons Casket Company site is not restricted. Consequently, there is the potential for direct contact to local human, animal, and botanical populations.

Municipal drinking water is supplied to local residents by Lancaster Water Works, Garrard County Water Association Incorporated, and Crab Orchard Water District. The Garrard County Water Association and the Crab Orchard Water District purchase water from the Lancaster Water Works which obtains water from 2 lakes located outside of a four mile radius of the site.

A ground water user survey indicates there are approximately 1330 potential ground water users located within a four mile radius of the Simmons Casket Company site. This value was determined by eliminating the areas of municipal supply as provided by water companies. The remaining unserved houses, shown on 7.5 minute U.S.G.S. topographic maps of the area, were multiplied by a 3.8 population conversion factor. The calculated value may be inflated due to the use of cisterns and hauled water in the area (Appendix A).

According to the Kentucky Nature Preserves Commission, there is one statelisted, threatened species, Simpsonia ambigua, residing within a four mile radius of the site (Appendix H).

REFERENCES

1964, U.S.G.S., Geochemistry of Natural Waters of the Blue Grass Region, Kentucky.

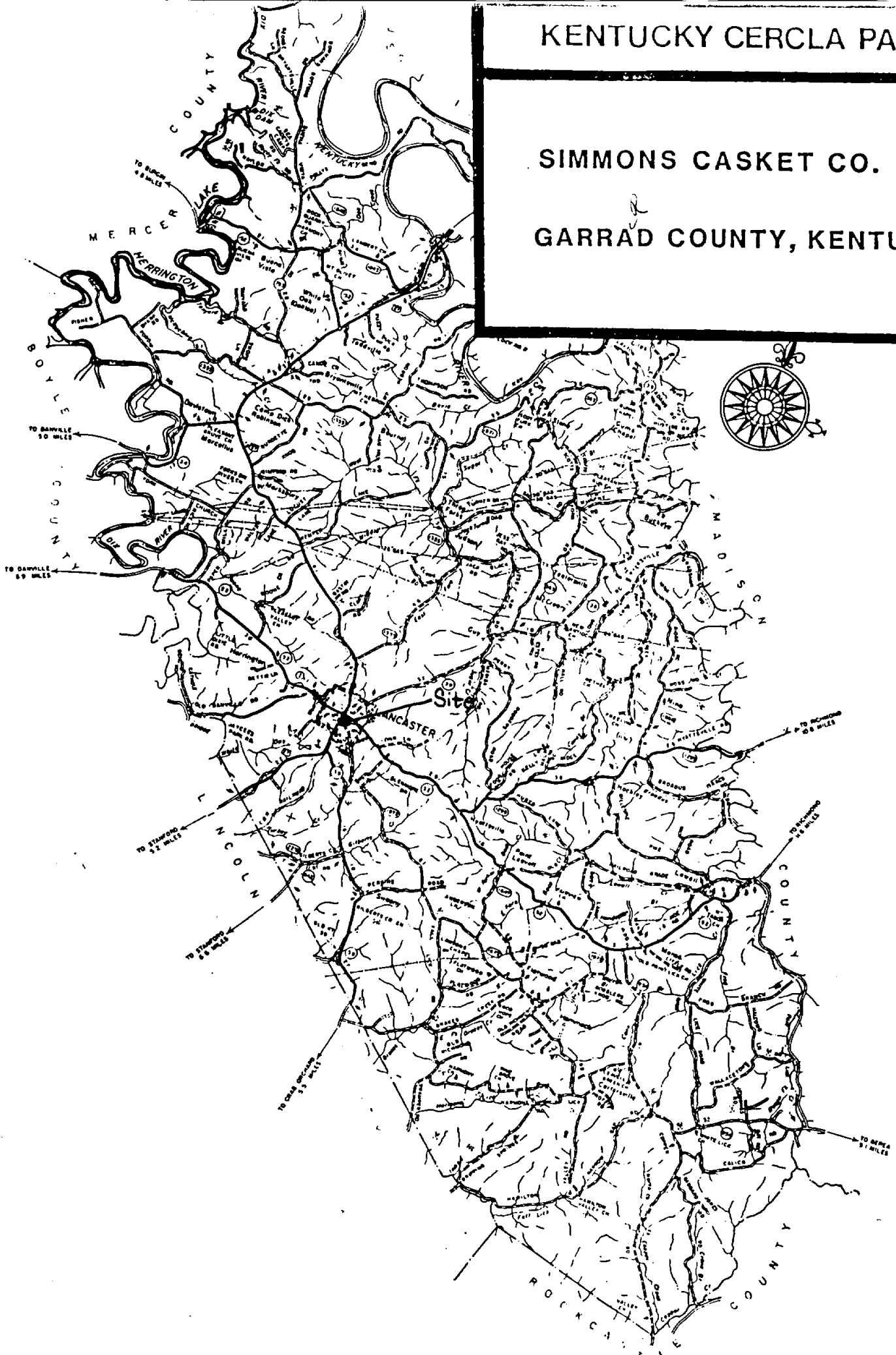
1960, U.S.G.S., Availability of Groundwater in Boyle, Garrard, Lincoln, and Mercer Counties, Kentucky.

1971, U.S.G.S., Geologic Map of the Lancaster Quadrangle, Garrard and Lincoln Counties, Kentucky.

KENTUCKY CERCLA PA/SI

SIMMONS CASKET CO. SITE

GARRAD COUNTY, KENTUCKY



Storage Tank
- diesel fuel

Underground
Storage Tanks
A - A-lacquer
B - paint thinner

[Storage Building]
not currently used

FINISHING
AND
SHIPPING

CALENDER
DEPT.

[Raw materials storage and welding]

RAW MAT'L.
STORAGE

MIXING

[3 stage washer
1 = H₂O + detergent
2 = H₂O
3 = H₂O]

Ovens

REG.
WHEEL

FINISHED
GOODS

MACH.
SHOP

LAB

BOILER

[Finished Casket Storage Area]

RESINOID
PRESS
DEPT.

MAINT.

LUNCH
ROOM

OFFICES

HOT
PRESS

BOILER

Paint and Lacquer Area]

for stripping
Paint and
lacquer from
caskets

Casket Manufacturing Description in Brackets

* The Underground
Storage Tanks were
removed in 1987.

Scale - 1" = 50'

Appendix to the Simmons Casket Company (Allison Abrasives) Site Map

Welding and Raw Materials Area

The parts (composed of steel, copper, and bronze) were stored and welded together in this area.

3 Stage Washer Area

The first washer contained water plus a detergent from the Dubose Chemical Company. The spent washer solution was mixed with 6 bags of soda ash before it was dumped into the sewer system. The other two washers contained only water.

Paint Area

The caskets were sprayed with paint and lacquer in this area. At one end was a vat used to dip and strip lacquer and paint from caskets.

Storage Area and Storage Building

Finish caskets were stored here.

Underground Storage Tanks - removed in 1987

- #1 - contained diesel fuel
- #2 - contained lacquer
- #3 - contained paint thinner

Record of Communication

☒ PHONE CALL☐ DISCUSSION☐ ON-SITE☐ CONFERENCE☐ OTHER☐ ON-CALL

Lancaster Water Works

FROM:

Carolyn Graycraft

DATE: 5/2/90

TIME:

SUBJECT:

Water distribution w/in 4 miles of the Simmons Casket Co. Site

SUMMARY OF COMMUNICATION:

Municipal water information came from 2 sources: researching the Uncontrolled Sites Branch water lines file and talking to Vivian Cotton of the Lancaster Water Works. Ms. Cotton stated that Lancaster Water Works obtains water from two city lake located southwest of Lancaster off of highway 27 and from the Kentucky River at an intake located more than 4 miles away from Lancaster. Ms. Cotton said Lancaster Water Works sells water to Garrard County Water Association and Crab Orchard Water District.

Carolyn Graycraft

CONCLUSIONS, ACTION TAKEN OR REQUIRED:

INFORMATION COPIES

TO:

GROUNDWATER USER DATA DOCUMENTATION

NAME OF SITE: Simmons Basket Company

COUNTY: Garrard

<u>RADIUS</u>	<u>HOUSE/BUILDING COUNT</u>	<u>POPULATION</u>
1/4 Mile	4	15.2
1/2 Mile	0	0
1 Mile	13	49.4
2 Miles	88	334.4
3 Miles	72	273.6
		<u>3 mile total</u> 672.6
4 Miles	173	657.4
		<u>4 mile total</u> 1330.0

METHODOLOGY: House and building counts are taken from U.S.G.S Topographic map(s). These numbers are then multiplied by the conversion factor of 3.8 persons per household, as suggested in EPA's Uncontrolled Hazardous Waste Site Ranking System Users Manual, to obtain populations.

REFERENCES: 7.5 Min U.S.G.S. Topographic Maps: Lancaster Quadrangle
Buckeye Quadrangle
Bryantville Quadrangle
Stanford Quadrangle

COMMENTS:

EPA'S COPY

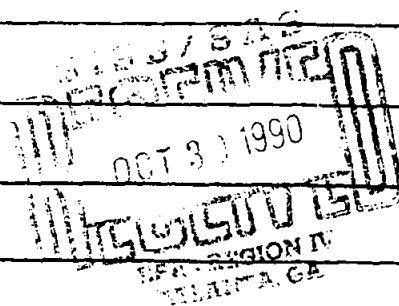
PRELIMINARY ASSESSMENT (2)
SIMMONS CASKET COMPANY
LANCASTER, KENTUCKY
EPA ID# 050-074-889

Facility name: Simmons Casket Company

Location: Lancaster, Kentucky

EPA Region: IV

Person(s) in charge of the facility: Lyn Osborn



Name of Reviewer: C. Craycraft

Date: _____

General description of the facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Site formerly produced caskets. The site has
been remodelled and now produces abrasive
wheels.

Potential contaminants include paint sludge,
laquers, and solvents such as 1,1,1-tri-
chloroethane.

Scores: $S_M = 34.2^*$ $S_{SW} = 59.2^*$ $S_{SW} = 0$ $S_B = N/A$

$S_{FE} = N/A$

$S_{OC} = 37.5^*$

* Denotes observed release score

IRS COVER SHEET

Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref (Section)
1 Observed Release	0 45	1	0 45	45	3.1
If observed release is given a score of 45, proceed to line 4 . If observed release is given a score of 0, proceed to line 2 .					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 3	2	4	8	
Net Precipitation 11"	0 1 2 3	1	2	3	
Permeability of the Unsaturated Zone silt/clay	0 1 2 3	1	1	3	
Physical State unknown	0 1 2 3	1	3	3	
Total Route Characteristics Score			10	15	
3 Containment <i>unknown</i>	0 1 2 3	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence <i>unknown</i>	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity <i>unknown</i>	0 1 2 3 4 5 6 7 8	1	8	8	
Total Waste Characteristics Score			26	26	
5 Targets					3.5
Ground Water Use	0 1 2 3	3	9	9	
Distance to Nearest Well/Population Served < 2000' <i>pop 2673</i>	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	20	40	
Total Targets Score			29	49	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5		NOR	22620		
		OR	33930	57.330	
7 Divide line 6 by 57.330 and multiply by 100 NOR = NO Observed Release; OR = Observed Release $S_{gw} = \frac{39.5 \text{ NOR}}{59.2 \text{ OR}}$					

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	<u>0</u> 45	45	4.1
If observed release is given a value of 45, proceed to line 4 . If observed release is given a value of 0, proceed to line 2 .					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	<u>0</u> 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall <i>22.75</i>	0 1 <u>2</u> 3	1	2	3	
Distance to Nearest Surface Water <i>2500'</i>	0 1 2 <u>3</u>	2	6	6	
Physical State <i>unknown</i>	0 1 2 <u>3</u>	1	3	3	
Total Route Characteristics Score			11	15	
3 Containment <i>unknown</i>	0 1 2 <u>3</u>	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 <u>18</u>	1	18	18	
Hazardous Waste <i>unknown</i>	0 1 2 3 4 5 6 7 <u>8</u>	1	8	8	
Quantity					
Total Waste Characteristics Score			26	26	
5 Targets <i>downstream surface water</i>					4.5
Surface Water Use <i>is not used within 3 miles</i>	<u>0</u> 1 2 3	3	0	9	
Distance to a Sensitive Environment <i>> 1 mile</i>	<u>0</u> 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	<u>0</u> 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			0	55	
6 If line 1 is 45, multiply 1 x 4 x 5		NOR	0		
If line 1 is 0, multiply 2 x 3 x 4 x 5		OR	0	64,350	
7 Divide line 6 by 64,350 and multiply by 100			$S_{SW} = \frac{0}{0} \begin{matrix} \text{NOR} \\ \text{OR} \end{matrix}$		

NOT SCORED

Fire and Explosion Work Sheet

Rating Factor	Assigned Value (Circle One)								Multi- plier	Score	Max. Score	Ref. (Section)
1 Containment	1		3						1		3	7.1
2 Waste Characteristics												7.2
Direct Evidence	0		3						1		3	
Ignitability	0	1	2	3					1		3	
Reactivity	0	1	2	3					1		3	
Incompatibility	0	1	2	3					1		3	
Hazardous Waste Quantity	0	1	2	3	4	5	6	7	8	1	8	
Total Waste Characteristics Score											20	
3 Targets												7.3
Distance to Nearest Population	0	1	2	3	4	5			1		5	
Distance to Nearest Building	0	1	2	3					1		3	
Distance to Sensitive Environment	0	1	2	3					1		3	
Land Use	0	1	2	3					1		3	
Population Within 2-Mile Radius	0	1	2	3	4	5			1		5	
Buildings Within 2-Mile Radius	0	1	2	3	4	5			1		5	
Total Targets Score											24	
4 Multiply 1 x 2 x 3											1,440	
5 Divide line 4 by 1,440 and multiply by 100										S.F.E. =		

	S	S ²
Groundwater Route Score (S _{gw})	39.5	1560.25
	59.2	3504.64
Surface Water Route Score (S _{sw})	0	0
	0	0
Air Route Score (S _a)	NOT	SCORED
$S_{gw}^2 + S_{sw}^2 + S_a^2$		1560.25
		3504.64
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		39.50
		59.20
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		22.83 *
		34.22

WORKSHEET FOR COMPUTING S_M

NOT SCORED

Air Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. Section
---------------	--------------------------------	-----------------	-------	---------------	-----------------

1	Observed Release	0	45	1		45	5.1
---	------------------	---	----	---	--	----	-----

Date and Location:

Sampling Protocol:

If line **[1]** is 0, the $S_k = 0$. Enter on line **[5]**

If line **1** is 45, then proceed to line **2**

2 Waste Characteristics											5.2
Reactivity and Incompatibility	0	1	2	3					1		3
Toxicity	0	1	2	3					3		9
Hazardous Waste Quantity	0	1	2	3	4	5	6	7	8	1	8

	Total Waste Characteristics Score		20	
--	-----------------------------------	--	----	--

3 Targets		5.3	
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1	30
Distance to Sensitive Environment	0 1 2 3	2	6
Land Use	0 1 2 3	1	3

Total Targets Score		39
---------------------	--	----

4	Multiply 1 x 2 x 3	35.100
---	--------------------	--------

5 Divide line **4** by 35,100 and multiply by 100 **S_a** =

Direct Contact Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. Section
1 Observed Incident	0 45	1	0 45	45	8.1
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	0 1 2 3	1	3	3	8.2
3 Containment <i>unknown</i>	0 15	1	15	15	8.3
4 Waste Characteristics Toxicity <i>unknown</i>	0 1 2 3	5	15	15	8.4
5 Targets					8.5
Population Within a 1-Mile Radius	0 1 2 3 4 5	4	12	20	
Distance to a Critical Habitat <i>> 1 mile</i>	0 1 2 3	4	0	12	
Total Targets Score			12	32	
6 If line 1 is 45, multiply 1 x 4 x 5			NGR	8100	
If line 1 is 0, multiply 2 x 3 x 4 x 5			OR	8100	21,600
7 Divide line 6 by 21,600 and multiply by 100			$SOC = \frac{37.5}{37.5} \begin{matrix} \text{NGR} \\ \text{OR} \end{matrix}$		

Simmons Casket Company

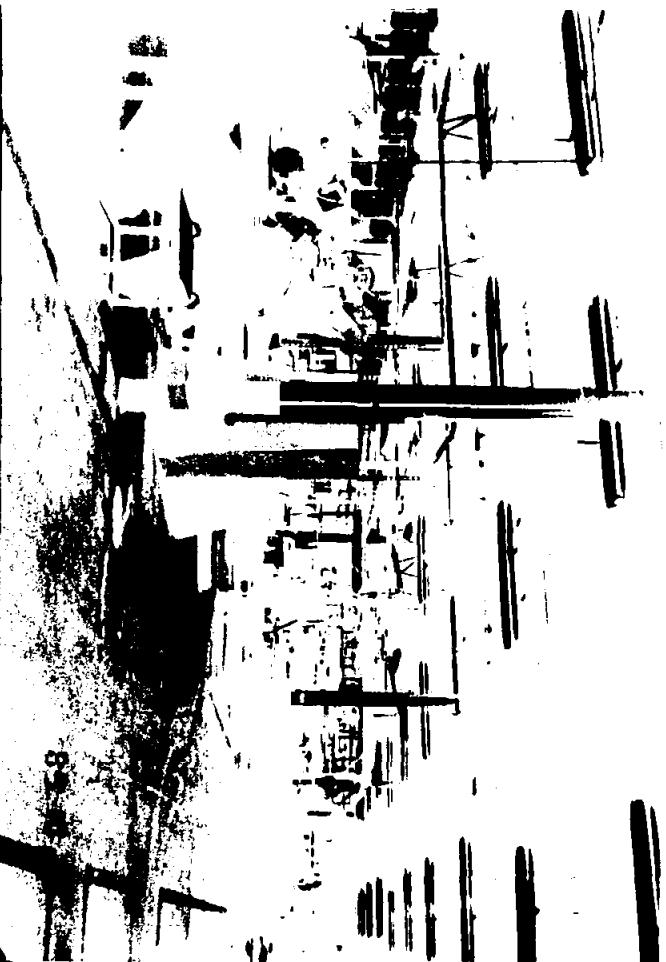
On October 27, 1989, Randy Thomas and I conducted a preliminary assessment site visit at the former Simmons Casket Company site (now called Allison Abrasives). We were shown around the facility by Lyn Debon and an employee who also had worked for the Simmons Company.

The site had been renovated by Allison Abrasives who now produces abrasive wheels at the facility.

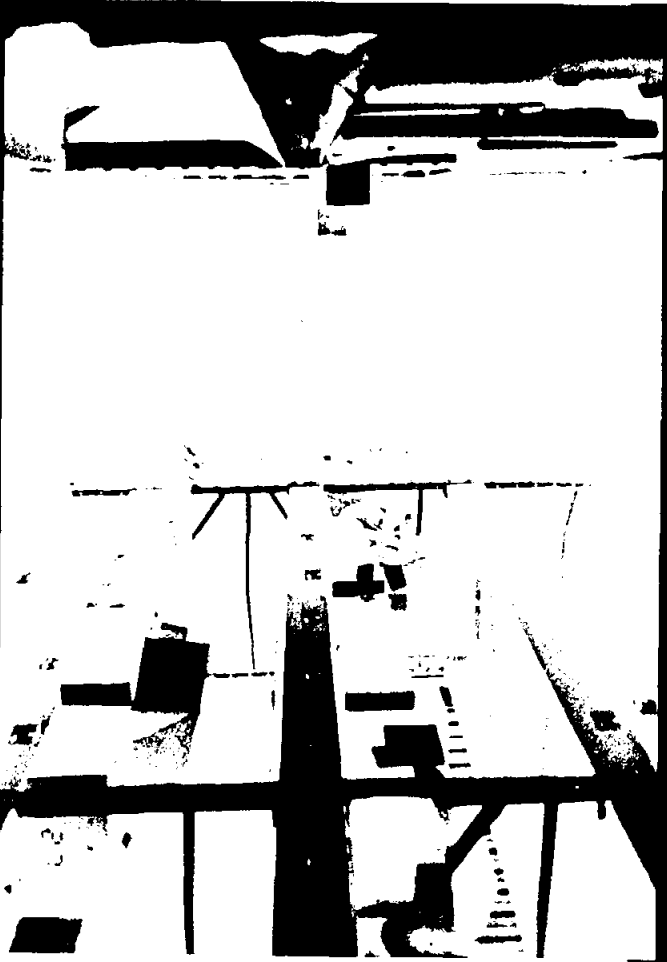
Brief History of the Site:

1. Operations ceased in 1984
2. In 1987 the site was sold to Allison Abrasives and renovated.
3. October 1987 - operations began again.

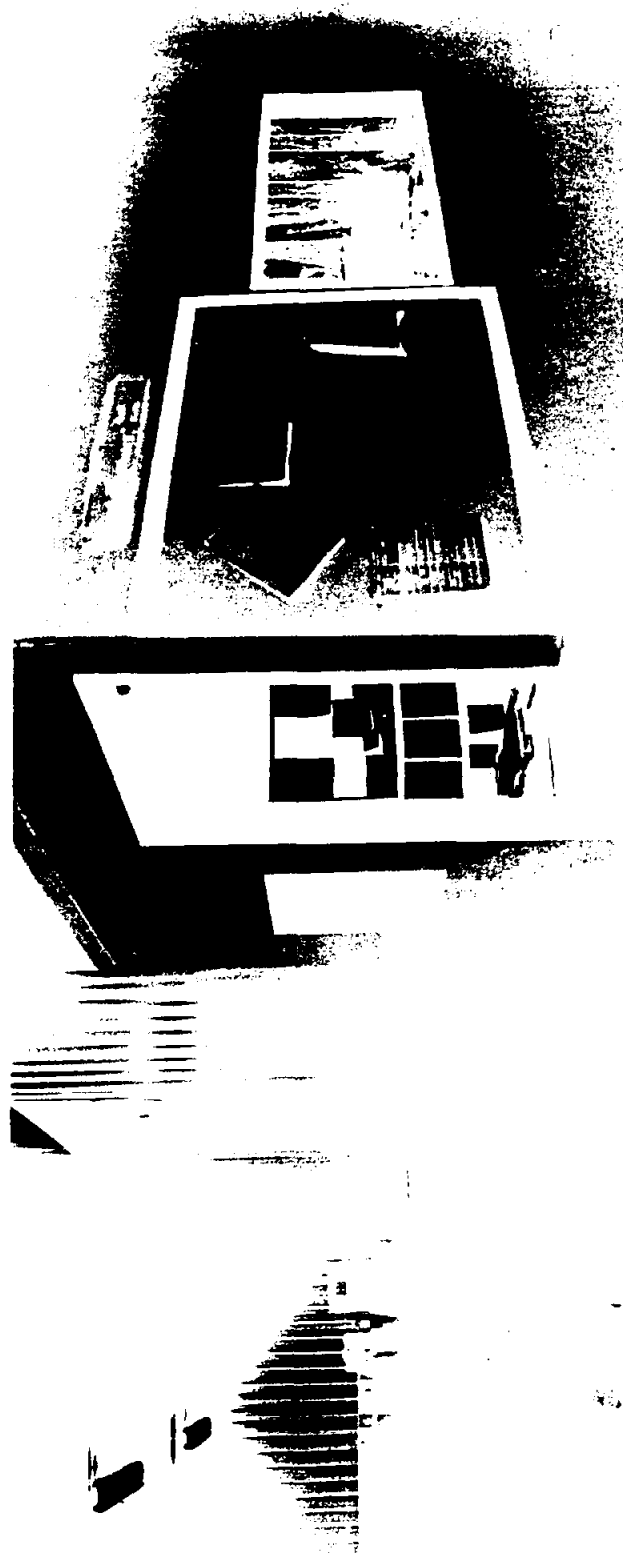
On the east side of the facility leaking drums and stained soil was discovered.



The old raw materials and welding area at the Simmons Casket Company site (alias Allison Abrasives, Inc.).



The old washer area at the Simmons Casket Company site (alias Allison Abrasives Inc.).



Pan view of part of the old paint area at the Simmons Casket Company site (alias Allison Abrasives, Inc.).



Pan view of drums located at the Simmons Casket Company site (alias Allison Abrasives, Inc.).



View of a concrete pad on which drums are stored at the Simmons Casket Company Site (alias Allison Abrasives, Inc.).



Top view of drums located at the Simmons Casket Company site (allies Allison Abrasives, Inc.).

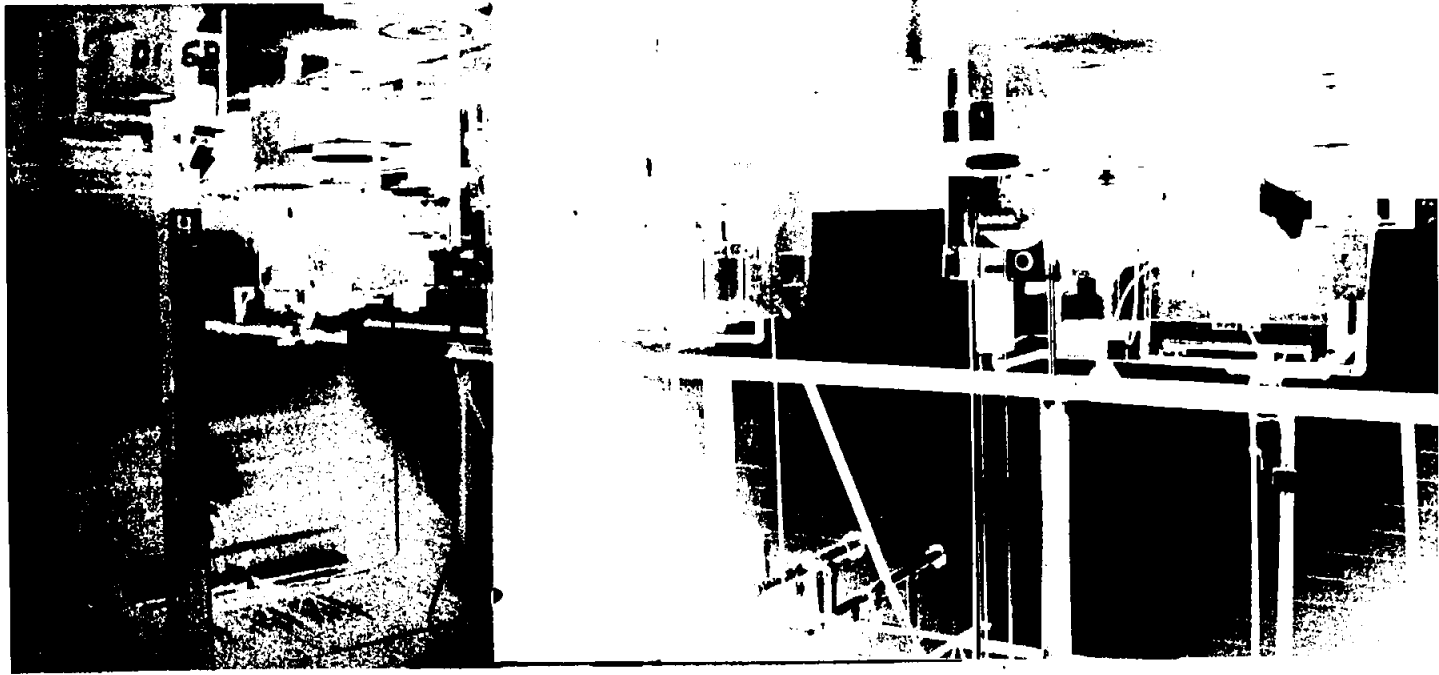




Part of the old paint area at the Simmons Casket Company site (alias Allison Abrasives, Inc.).



The old storage area at the Simmons Casket Company site
(alias Allison Abrasives, Inc.).



MEMORANDUM

TO: Jack E. McClure, Jr., Acting Chief
Hazardous Material Management Section

FROM: Leslie Wilson, Environmental Specialist I
Hazardous Material Management Section

DATE: June 19, 1978

SUBJECT: National Casket in Lancaster, Kentucky

On June 6, 1978, I met with Joe Shore, Purchasing Agent, for National Casket in Lancaster, Kentucky to discuss their present paint sludge disposal practices.

National Casket produces waste composed mostly of paper and wood. They also dispose of paint sludge, waste paint and solvents. Their waste paint and solvents are presently sent to Inland Chemical Corporation for recycling. Their paint sludges are compacted in a 40 yard compactor along with their non-hazardous waste material. Their waste is hauled away by Steven's Disposal in Danville, Kentucky to the landfill in Lancaster, Kentucky.

I have requested that National Casket complete our analysis form for their paint sludge. They dispose of approximately two (2) 55 gallon drums a week.

LW:cjg

MEMORANDUM

TO: Daniel R. Dolan, Chief
Hazardous Material Management Section

FROM: Leslie A. Moberly, Environmental Specialist
Hazardous Material Management Section *LM*

DATE: March 26, 1979

SUBJECT: Hot Line Complaint, Garrard County, National Casket.

On March 20, 1979, I met with Joe Shore, plant manager for National Casket. The purpose of this visit was to discuss a hot Line complaint concerning the disposal of National Casket's waste paint sludge and solvents.

According to Mr. Shore their paint sludge is picked up and disposed of by Stephen's Disposal Company. I verified this information with Hal Stephens who explained that they take the paint sludge to the Garrard County landfill. National Casket is now in the process of completing the special permission/analysis form for the paint sludge.

National Casket's waste solvents, mainly Toluene, are picked up by the George Whitesides Company. I verified this information with the George Whitesides Company.

I contacted the individual who made the complaint and explained the results of my investigation. I would like to note that this individual would like to remain anonymous *ok* to the company in question.

LAM:jlc

ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
OFFICE OF COMMUNICATIONS AND OUTREACH AFFAIRS

79-253 Date 3/15/79 Division Referrals 1. H. M. W. M. 2. _____
2:10pm

Problem/Request: National Casket Manufacturing Co. is secretly and (illegally) disposing of various paint + lacquer material. Will not say where they are disposing of waste.

LOCATION: Hwy 39 - South Lancaster, Ky.

DATE OF OCCURENCE: past year

COMMENTS: Caller is a city councilman and said the company was illegally disposing of waste at the Stanford Landfill until they were caught last year - now no one knows where they are shipping it or how! - year ago

NAME: Larry Kelly PHONE: (606) 792-4116 COUNTY: Garrard Co.

ADDRESS: 110 Dogwood Drive CITY: Lancaster STATE: Ky ZIP: 40444

OTHERS CONTACTED:

Call in response to Gov's press conf. 3/14/79

1. Dolan _____
Dorsey Duncan
SIGNATURE

TO BE COMPLETED BY LIAISON:

DIVISION _____ STATUS _____

ACTION TAKEN: _____

CONTACTED CALLER BY LETTER _____ PERSONAL INTERVIEW _____ PHONE _____ DATE: _____

ACTION PENDING _____

REFERRAL TO OTHER DEPARTMENT/DIVISION _____

C. Frank Harsher, III

~~XXXXXX XXXXX~~
Secretary



REFERENCE 9

COMMONWEALTH OF KENTUCKY
DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIAL AND WASTE MANAGEMENT
PINE HILL PLAZA
1121 LOUISVILLE ROAD
FRANKFORT, KENTUCKY 40601

November 27, 1979

National Casket Company
Box 42, Industry Road
Lancaster, Kentucky 40444

Handwritten: General Co. 100

Attn: Mr. Ron Milburn

Dear Mr. Milburn:

Kentucky's present regulatory program does not permit the disposal of any hazardous waste at other than a permitted hazardous waste management facility. Further, Kentucky does not presently have a permitted chemical landfill.

The Department's special permission system is designed to screen out all hazardous wastes and permit only identifiably non-hazardous material to be disposed of in landfills in the Commonwealth.

We have reviewed the leachate test results of your paint sludge. The high concentrations lead (PB) in your company's waste resulted in it being categorized as hazardous. This determination was made by applying the definitions contained in the proposed Federal Hazardous Waste Regulations (Federal Register, December 18, 1978, p. 58946 et. seq.) and Kentucky Hazardous Waste Regulations and Guidelines.

If you have any questions concerning alternative disposal techniques, out-of-state disposal facilities, or additional information on the special permission request rejection, please feel free to call. A member of our field staff will call on you shortly to discuss potential disposal alternatives.

Sincerely,

Handwritten signature: Roger Blair
Roger Blair, Director
Division of Hazardous Material &
Waste Management

cc: Pat Haight, Manager
Leslie Moberly, Supervisor
John Brooks, Enforcement

Jackie Swigart
Secretary



REFERENCE 10

COMMONWEALTH OF KENTUCKY
DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIAL AND WASTE MANAGEMENT
PINE HILL PLAZA
1121 LOUISVILLE ROAD
FRANKFORT, KENTUCKY 40601

January 8, 1980

~~Confidential~~
City Hall
Lancaster, Kentucky 40444

Dear Sir:

→ This letter is in response to a January 2, 1980 request from ~~National Casket Company~~ to dispose of paint sludge waste at your landfill #040.06 in Garrard County. We have evaluated the results of the leach test submitted by National Casket Company. Based on these test results, the materials would be classified as non-hazardous. Therefore, permission is hereby granted for the disposal of 2,000 gallons per year of this waste material. However, because of variable test results, quarterly leach tests for lead content will be required.

You may consider this letter as permission to accept this waste until October 2, 1980, expiration of your current permit. Before the expiration date of your permit, we will again review the disposal request and make a decision as to further acceptance of the waste. However, this permission may be revoked by the Department before that date if it is determined that the disposal is not in accordance with these specifications and requirements.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "Roger Blair".

Roger Blair, Director
Division of Hazardous Material &
Waste Management

cc: Pat Haight, Manager
John Brooks, Enforcement
Marsha Swain, Inspector
George Parker, Engineer

EPA Notification of Hazardous Waste Site

REFERENCE 11

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

KY5 000001085

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name

Street

City

State

Zip Code

B Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site Simmons Casket Co. Div. G+W Casket Corp.

Street

Route 3 DFF KY 39

City

Lancaster

County

Garrard

State

Ky.

Zip Code

40444

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title)

Madden, Frank B.

Phone

(606) 792-2101

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year)

1965

To (Year)

Present

E Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:

Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☐ Inorganics
3. ☒ Solvents
4. ☐ Pesticides
5. ☐ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☐ Other (Specify)

Source of Waste:

Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☒ Other (Specify)

Paint Operation

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:

EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

F003
F005

F018

RECEIVED
EPA/REGION IV
JAN 12 11 37 AM
Hazardous Waste
DIVISION

000444

Above - Hazardous waste from non specific sources 261.31

Notification of Hazardous Waste Site

Side Two

F Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☒ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet Unknown

gallons 5000 Maximum

Total Facility Area

square feet 2750'

acres .09

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☒ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

SEE ATTACHED:

- A. Topographical Map
- B. Aerial Photo copy - Plant Site
- C. Photo copy Drum "Waste" storage area
- D. Drawing of Plant Site
- E & F Copies of aerial photos

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

Paint thinner waste - stored in 55 gal. drums - pumped into tank trucks once or twice per year - transported to a recycling facility to reclaim the solvents.

Paint Sludge F018 - rendered neutral and transported to City owned land fill
040.06 Est. 2000 Gals.per year

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other".

Name Frank B. Madden, Jr.

Street P.O. Box 42 Industrial Rd.

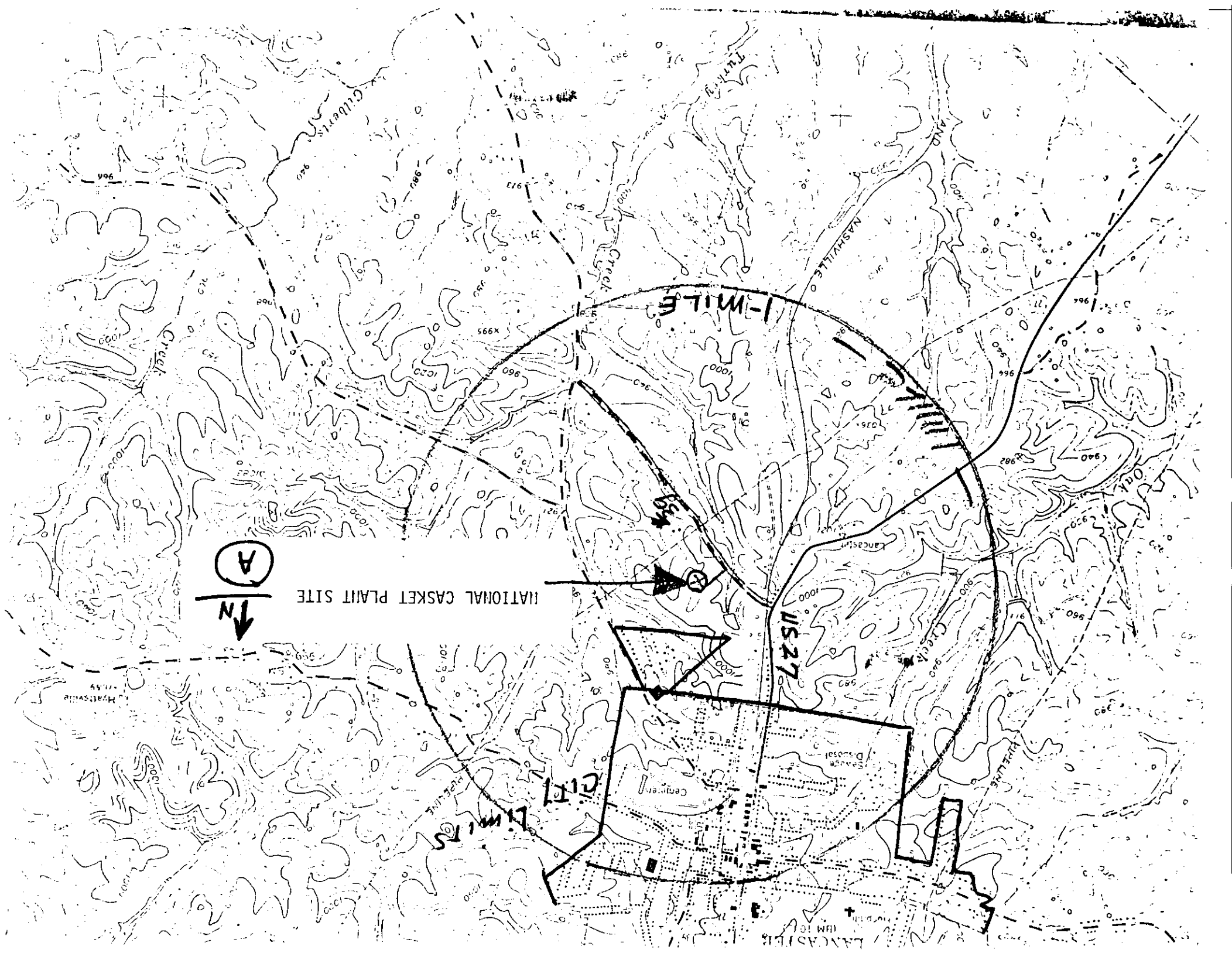
City Lancaster State Ky Zip Code 40444

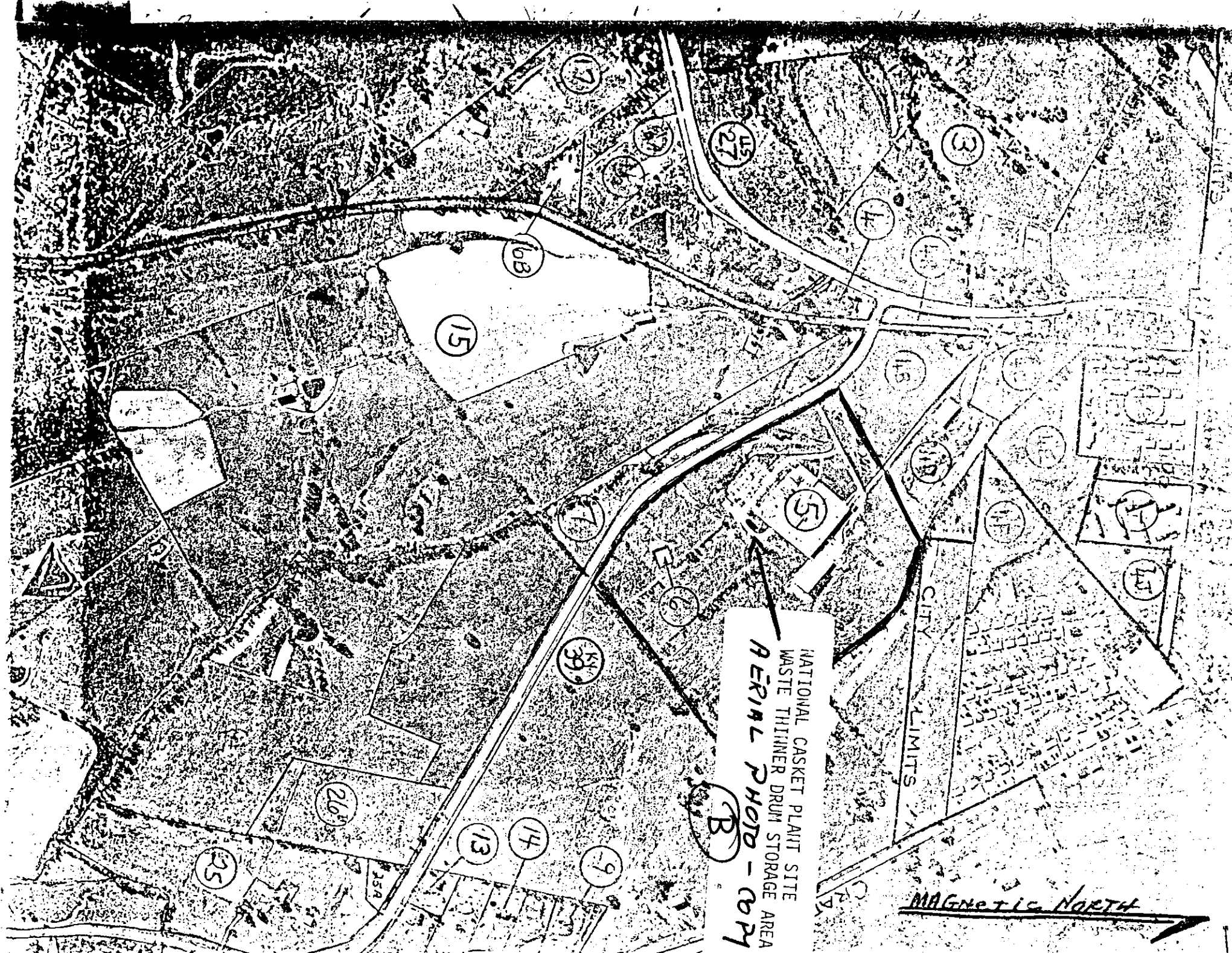
Signature

Date

5/7/89

- ☐ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☒ Other





NATIONAL CASKET PLANT SITE
WASTE THINNER DRUM STORAGE AREA
AERIAL PHOTO - COPY

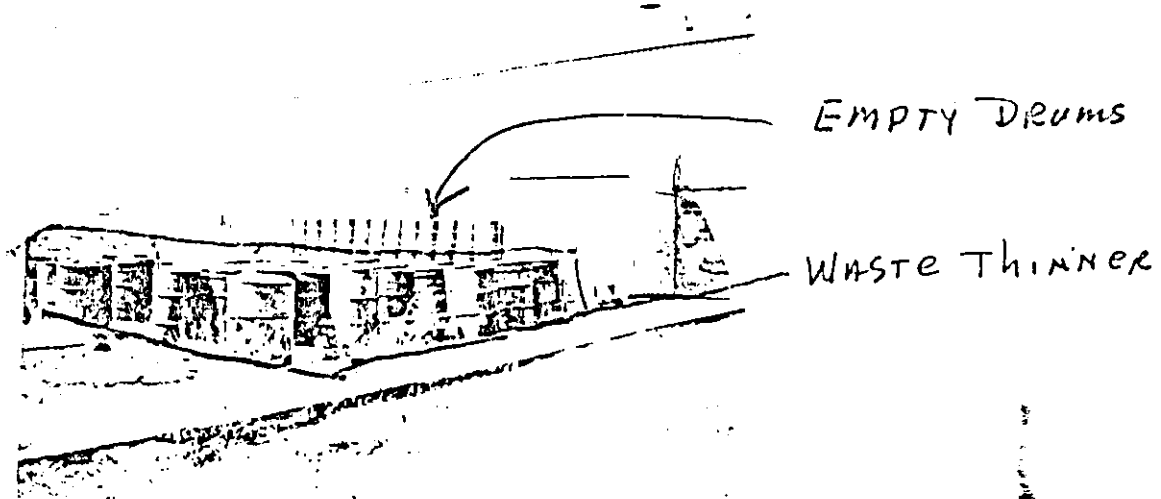
(B)

MAGNETIC NORTH

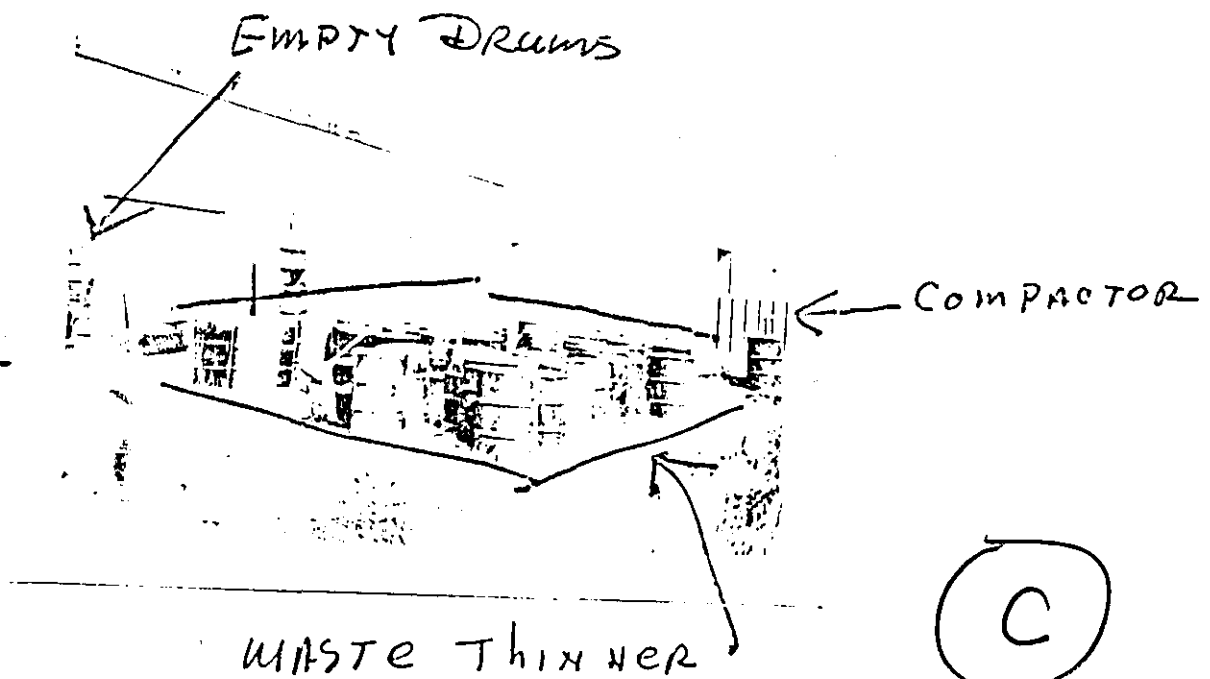
NATIONAL Casket Co
hAnCster, Kentucky
Waste Thinner Storage

10-14-80

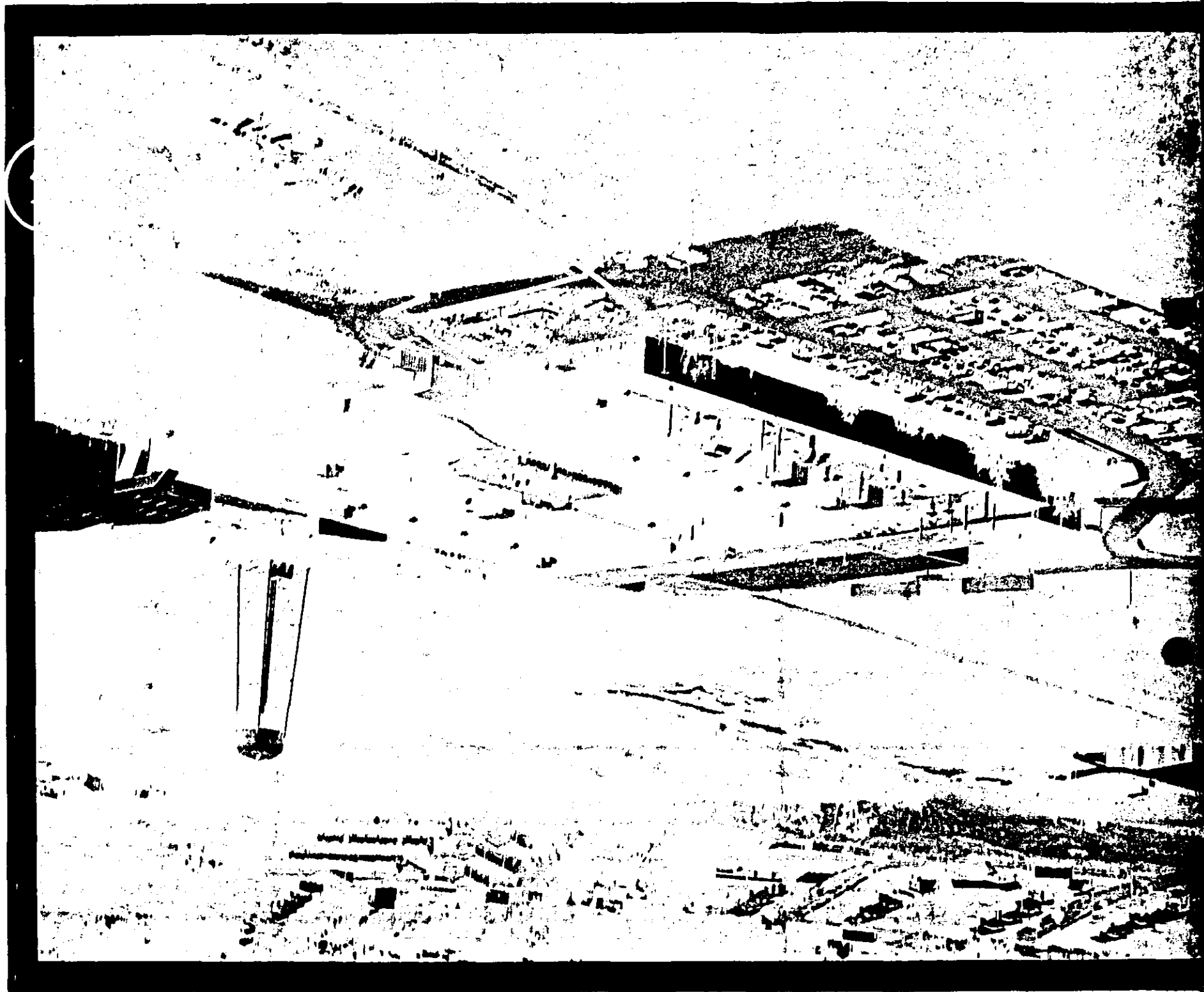
South to North

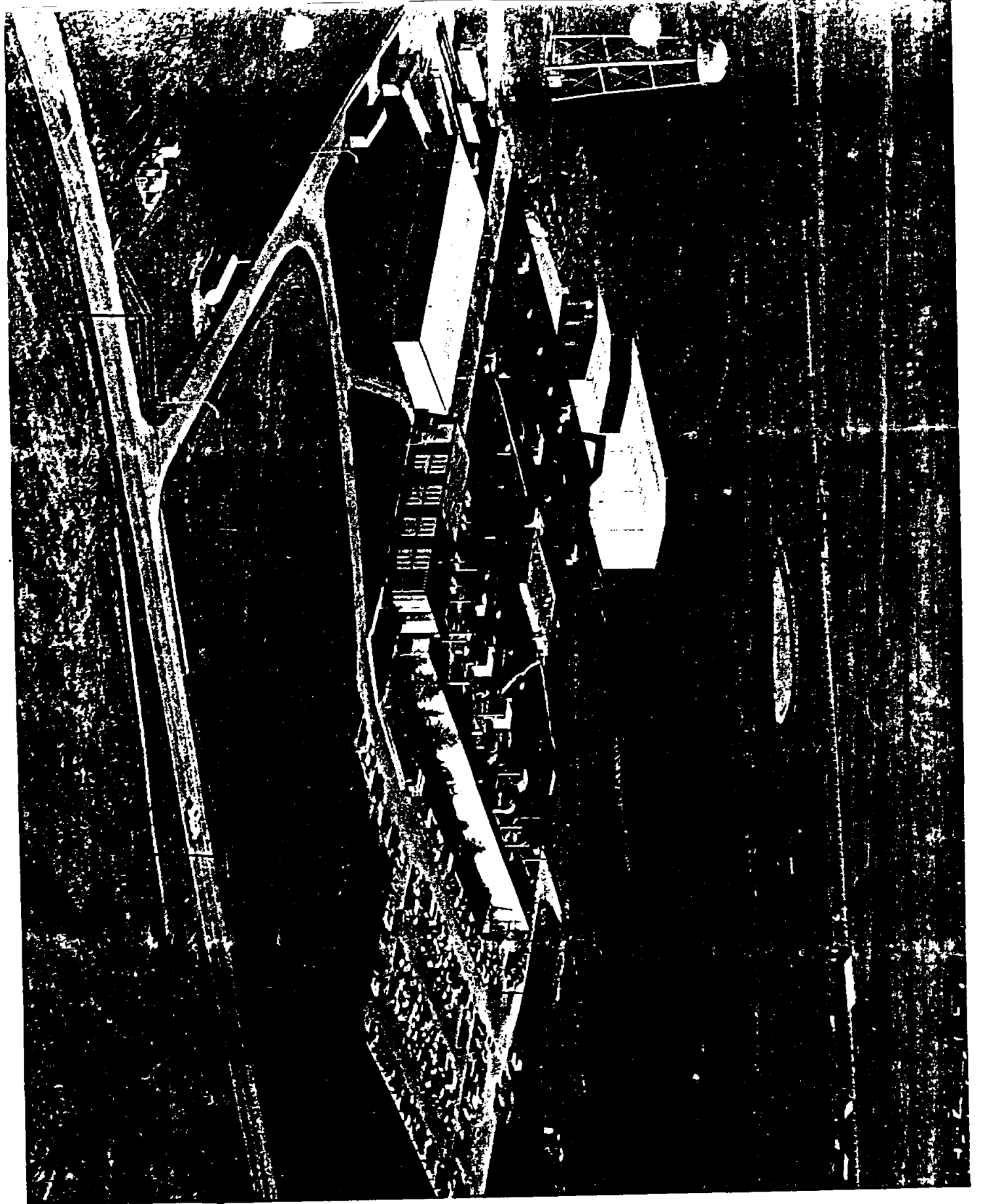


West to East



(C)





KENTUCKY DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENT
DIVISION OF WASTE MANAGEMENT
GENERATOR INSPECTION SHEET

REFERENCE 12

Facility Name SIMMONS CASKET Registration # KYD05-007-4804

County GARRARD Date 5-21-82 Time 1:15 p.m. Routine ☒ Followup ☐

Type of Operation PAINTING OPERATION

A. VERIFICATION OF REGISTRATION		C	NC	N/A	C. WASTE STORAGE (continued)	C	NC	N/A
1. Operations consistent with Registration	(<input checked="" type="checkbox"/>)(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)				7. The storage of ignitable, reactive or the mixture of incompatible waste is conducted so that it does not produce extreme heat, pressure, toxic or flammable fumes, violent reaction or damage the container's structural integrity.	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)		
B. RECORDS/MANIFESTING								
1. Test results and waste analysis records maintained	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)				8. Storage area(s) are inspected by owner/operator at least weekly by log.	(<input type="checkbox"/>)(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)		
2. Manifests correct/complete	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)				9. Personnel have been trained in emergency procedures.	(<input type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)		
3. Manifests maintained (Generator's copy and/or returned TSD facility copy)	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)				10. Hazardous waste storage tanks designed to prevent or contain spills.	(<input type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)		
4. Exception report submitted and maintained	(<input type="checkbox"/>)(<input type="checkbox"/>)(<input checked="" type="checkbox"/>)				11. Contingency Plan Maintained at Facility *	(<input type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)		
5. Annual reports submitted and maintained	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)							
6. Notification of international shipments	(<input type="checkbox"/>)(<input type="checkbox"/>)(<input checked="" type="checkbox"/>)							
C. WASTE STORAGE					D. MISCELLANEOUS INFORMATION			
1. Containers meet DOT requirement	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)				1. Previous non-compliances corrected	Yes	No	
2. Condition of containers	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)				2. Photographs	Yes	No	
3. Containers labeled and marked properly	(<input type="checkbox"/>)(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)				3. Samples collected	Yes	No	
4. Beginning of waste accumulation dated	(<input type="checkbox"/>)(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)				4. a receipt given	Yes	No	
5. Ninety (90) day accumulation	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)				4. Type of analysis required			
6. Containers holding ignitable or reactive waste are located fifty feet or more from the facilities property line	(<input checked="" type="checkbox"/>)(<input type="checkbox"/>)(<input type="checkbox"/>)				5. Other existing environmental permits (list)			

NON-COMPLIANCES

Remedial Measures and Expected Correction Date: only one drum is currently
1,1,1-Trichloroethane needs to be added to registration. Two drums of
1,1,1-Trichloroethane and 1 drum paint thinner need labels. Log needs to be
kept weekly. Log is maintained which tells when drums are placed in storage
area and date drums are shipped. * Contingency plan needs work.

INVESTIGATOR'S SIGNATURE: Hannah Leonard TITLE: ENVIRONMENTAL SUPERVISOR

I hereby acknowledge receipt of a copy of this report and do further acknowledge that I have been apprised of the discrepancies and alleged violations noted during the inspection.

SIGNED: C. S. Vinton TITLE: Engineer

* Explanation of inspection categories on reverse side

** C = Compliance NC = Non-Compliance N/A = Not Applicable

5/8/81

September 23, 1982

Mr. Steve Vinson
Industrial Engineer
Simmons Casket Company
P.O. Box 42
Industry Road
Lancaster, Kentucky 40444

RE: EPA I.D. KYD05-007-4889

Dear Mr. Vinson:

The Division of Waste Management, acting under RCRA Phase I Interim Authorization (as published in the April 1, 1981, Federal Register), is withdrawing your U.S. EPA form 3510-1 known as the Federal Hazardous Waste Facility permit application part "A". The U.S. EPA has determined that your company can terminate their interim status as a storage facility without complying with 40 CFR Part 265 Subparts G and H, provided they continue to use the area for storage of hazardous waste which will be removed within the 90 day limit and are in compliance with 40 CFR 262.34. If your company no longer intends to use the area for storage of hazardous wastes, it must be closed in accordance with 40 CFR Part 265 Subpart G and H.

If you have any questions on this, please contact James A. Determann of this office at (502) 564-6716, Ext. 248.

Sincerely,



J. Alex Barber, Director
Division of Waste Management

JAB:JAD:cg

cc: James H. Scarbrough, U.S. EPA
Field Supervisor

JACKIE SWIGART
SECRETARY



REFERENCE 14

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Division of Waste Management
March 23, 1983

Mr. Steve Vinson
York Casket Company (formerly Simmons Casket Co.)
P.O. Box 42
Lancaster, Kentucky
Garrard Co.

Dear Mr. Vinson:

During an inspection on March 18, 1983, it was determined that wastes shipped from your facility on March 10, 1983, had been stored for more than 90 days. It is a violation of 401 KAR 32:030, Section 5(2) formerly 401 KAR 2:070, Section 3 (5)(6) to accumulate hazardous wastes for more than 90 days without a storage facility permit.

Although the problem appears to be caused by personnel changes, wastes must be shipped within 90 days. The regulations only allow the Cabinet to grant an extension of up to 30 days if there are unforeseen, temporary, uncontrolled circumstances.

York Casket Company will be required to obtain a permit for a hazardous waste storage facility if, in the future, we determine that additional violations of KAR 32:030, Section 5(2) exist.

If you have any questions, please feel free to contact me at (502) 564-6716-275.

Yours truly,

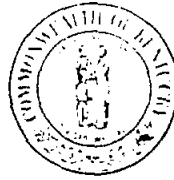
Hannah Leonard /ma

Hannah Leonard, Supervisor
Frankfort Field Office
Div. of Waste Management

HL/blp

cc: Carl Schroeder

CHARLOTTE E. BALDWIN
SECRETARY



REFERENCE 15

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

MEMORANDUM

TO: Caroline P. Haight, Manager
Permit Review Branch

FROM: Barry Burrus, Chief
Uncontrolled Sites Section

SUBJECT: Uncontrolled Site Close-out for Simmons Casket Co. Site
Garrard County

DATE: March 21, 1984

Simmons Casket Co. (now the York Casket Co.) is a manufacturer of wooden and metal caskets. The wastes produced by this facility include solvent waste which are transported to Reclaimed Energy, Inc., Connersville, Indiana by a permitted transporter and non-hazardous paint sludge which is disposed of in a permitted landfill.

Prior to September 23, 1982, this facility was regulated by Part "A" of the Federal Hazardous Waste Facility permit application. This accounts for their inclusion on the ERRIS list. On this date the KYNREPC's Division of Waste Management, acting under RCRA Phase I Interim Authorization, withdrew their Part "A". Investigation of the Division of Waste files has determined that no problems have existed with this company's handling of hazardous waste which would qualify them as an uncontrolled site.

In consideration of the aforementioned investigation, I am recommending no further action to be taken on this site and further recommend that it be removed from the uncontrolled site list.

BB/JC/las

cc: Hannah Leonard
Bob Prewitt
File
EPA



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
KY D050074889

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)
Simmons Casket Co.
02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
P.O. Box 42
03 CITY
Lancaster
04 STATE 05 ZIP CODE 06 COUNTY
KY 40444 Garrard
07 COUNTY CODE 08 CONG DIST
40
09 COORDINATES LATITUDE LONGITUDE
37° 36' 35" 0 84° 34' 45" 0

10 DIRECTIONS TO SITE (Starting from nearest public road)
Site is located on Hwy #39 & 27 south which is the main highway running north and south through the town of Lancaster, Kentucky. To reach the site, travel approximately 7 mile south on Hwy #39 & 27 from its intersection with State Route 52 at the center of town.

III. RESPONSIBLE PARTIES

01 OWNER (if known)
Simmons Universal
02 STREET (Business, mailing, residential)
372 Washington Street
03 CITY
Wellesley Hills
04 STATE 05 ZIP CODE 06 TELEPHONE NUMBER
MA 02181
07 OPERATOR (if known and different from owner)
York Casket Co (formerly Simmons Casket Co)
08 STREET (Business, mailing, residential)
P.O. Box 42
09 CITY
Lancaster
10 STATE 11 ZIP CODE 12 TELEPHONE NUMBER
KY 40444 606-792-2101
13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (RCRA 103 c) DATE RECEIVED: MONTH DAY YEAR ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE 11, 23, 83
☐ NO
BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: (Specify)
CONTRACTOR NAME(S):

02 SITE STATUS (Check one)
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN
03 YEARS OF OPERATION
1965 To Date
BEGINNING YEAR ENDING YEAR ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Paint thinner waste & Solvent waste transported to Reclaimed Energy Inc., Connersville, Ind. for recycling by permitted transporter: Oil Service Co. Route 3 Petty Lane, Columbia, Tenn. 38401
Paint Sludge; non-hazardous disposed of in permitted landfill.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

N/A Please refer to Section IV, Part 3 of form.

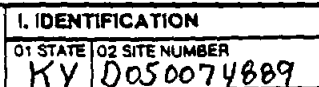
V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one, if high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incident)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☒ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT
Hannah Leonard (Field Supervisor)
02 OF (Agency/Organization)
Env. Protection Div. of Waste Mgmt (Frankfort)
03 TELEPHONE NUMBER
502-564-6716
04 PERSON RESPONSIBLE FOR ASSESSMENT
Jim Childers (Geologist)
05 AGENCY
Env. Protection Div. of Waste Mgmt
06 ORGANIZATION
07 TELEPHONE NUMBER
502-564-6716
08 DATE
3, 20, 84
MONTH DAY YEAR



- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

EPA FORM 2070-12 (7-81)



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
KY D050074889

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ B. SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ C. CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ E. DIRECT CONTACT 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ F. CONTAMINATION OF SOIL 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

N/A

01 ☐ G. DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ H. WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ I. POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
KY D050074889

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (include name(s) of species)

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES
(Spills/runoff/leaking drums)

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

N/A

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: N/A

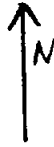
IV. COMMENTS

Prior to September 23, 1982, this facility was regulated by part "A" of the Federal Hazardous Waste Facility permit application. This accounts for their inclusion on the ERLS list. On this date the KYNREPC's Division of waste management, acting under RCRA Phase I Interim Authorization, withdrew their part "A". No problems have been detected in their handling of hazardous waste which would qualify the facility as an uncontrolled site.

V. SOURCES OF INFORMATION (Cite specific references, e. g., State files, sample analysis, reports)

KYNREPC's Division of waste management files

STATE OF KENTUCKY
KENTUCKY GEOLOGICAL SURVEY
UNIVERSITY OF KENTUCKY



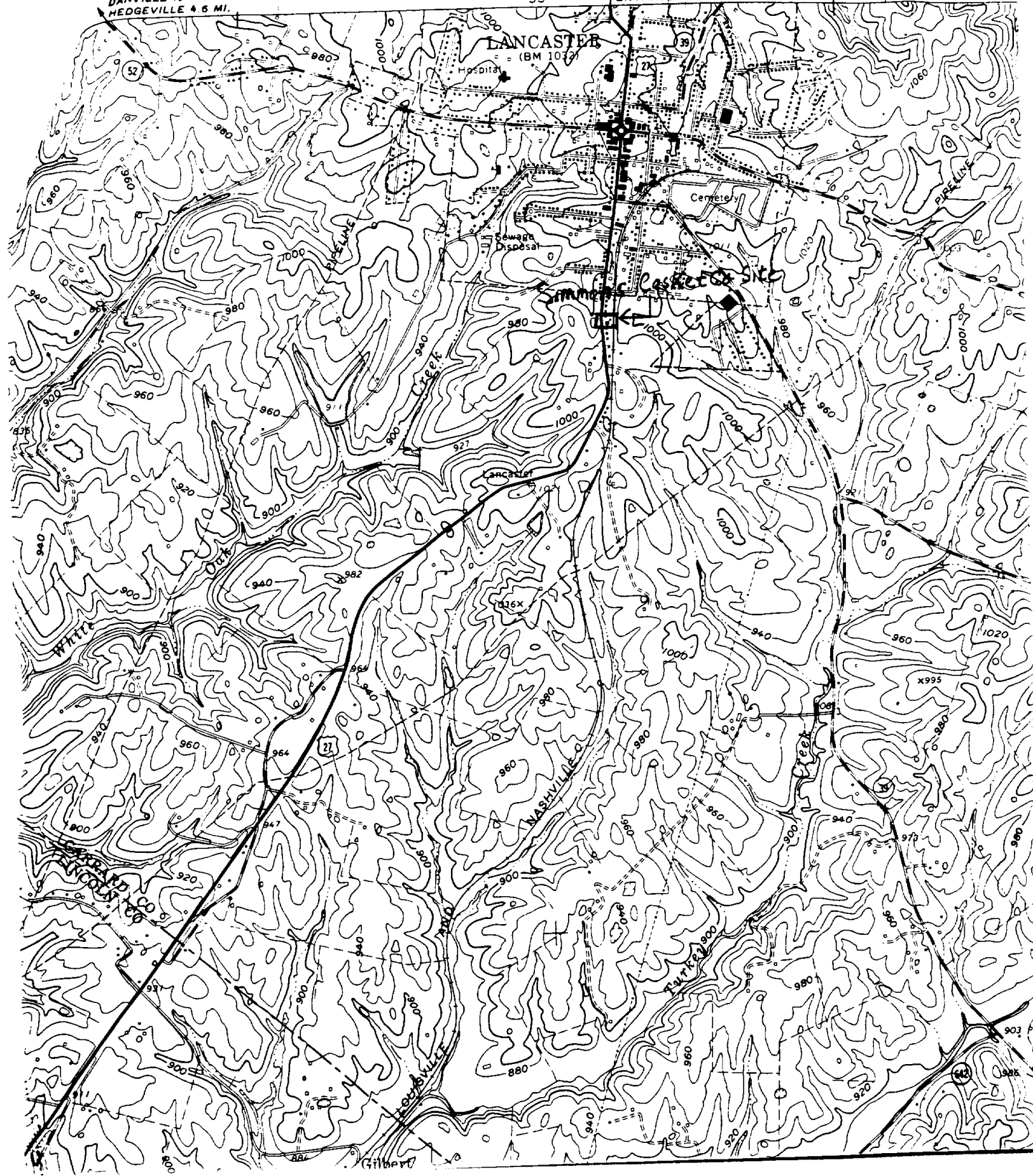
R10R

DANVILLE 10 MI.
HEDGEVILLE 4.6 MI.

35'

LEXINGTON 35 MI.
BRYANTSVILLE 8.7 MI.

(BUCKEYE)



REGION IV RCRA/NPL POLICY QUESTIONNAIRE FOR INITIAL SCREENING

Site Name: Simmons Casket Company (York Casket Co.)
 City: Lancaster State: Ky
 Facility I.D. Number: KYD050074889
 Type of Facility: Generator _____ Transporter _____ TSD _____

I. RCRA APPLICABILITY

	yes	no
Does the facility have RCRA interim status?	_____	<u>✓</u>
Does the facility have a final or post-closure permit? If so, date issued _____	_____	<u>✓</u>
Is the facility a non-notifier that has been identified by States or EPA?	_____	<u>✓</u>
Is the facility a known or possible protective filer?	_____	<u>✓</u>
Have RCRA wastes been stored onsite for longer than 90 days since November 19, 1980?	_____	<u>✓</u>
Have RCRA wastes been disposed onsite since November 19, 1980?	_____	<u>✓</u>

STOP HERE IF ALL ANSWERS TO QUESTIONS IN SECTION I ARE NO

II. FINANCIAL STATUS

	yes	no
Is the facility owned by an entity that has filed for bankruptcy under federal laws (Chapter 7 or 11) or State laws?	_____	_____
If yes, what has it filed under?		
Chapter 7 _____ Chapter 11 _____ Other _____		

July 22, 1985

Mr. Carl H. Tiedt
Hallmark Casket Co.
P.O. Drawer G
Marshfield, MO. 65706

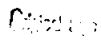
RE: York Casket - EPA I.D. KYD05-007-4889 - Garrard Co.

Dear Mr. Tiedt:

This letter is in response to your April 10, 1985, letter requesting a change in your generator status for your Kentucky site. We have reviewed your request and concur with your determination. Therefore, we are changing your generator status to that of closed. We will retain your EPA Identification Number and if at some time in the future your site becomes a hazardous waste generator it will only be necessary for you to register that activity with this office.

If you have any questions, please feel free to contact James Determann of this office at (502) 564-6716, Ext. 231.

Sincerely,


Caroline Patrick Haight
Manager, Permit Review Branch
Division of Waste Management

CPH:JAD:cg

cc: Hannah Helm, Area Supervisor
Ann Cole, U.S. EPA Region IV
Tim Hockensmith, Revenue Cabinet

SOLID WASTE BRANCH ONLY:

REFERENCE 17

RECEIVED
APR 11 1989

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CAI
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Date Approved/Denied: 5/24/89
County: _____

DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

APPLICATION TO ACCEPT AN ADDITIONAL WASTE STREAM

☒ NEW
☐ UPDATE

(Prepare an individual application for each waste stream)

I. WASTE GENERATOR INFORMATION

A. GENERATOR IDENTIFICATION:

1. Name: Allison Abrasives, Inc.
2. Mailing Address: Box 192, Lancaster, KY 40444
3. Address Where Waste Generated: 163 Industry Road, Lancaster, KY 40444
4. Contact Person: Lynn Osborne 5. Telephone: 606/792-3033

B. WASTE DESCRIPTION:

1. Waste Name: Process waste generated from abrasive cut-off wheel manufacture
Describe source of the waste including industrial process: Waste generated from abrasive grains, fillers, and resins during the manufacture of cut-off wheels.
2. Is the waste hazardous under 401 KAR 31:010, Section 3, which includes the characteristics of 401 KAR 31:030 and the lists of 401 KAR 31:040? ☐ Yes ☒ No (If yes, contact your local Division of Waste Management Field Office for further assistance. See instructions for locations and telephone numbers.)
3. Is the waste an "exempt" hazardous waste under the regulatory cites in the Instructions? ☐ Yes ☒ No
Regulatory Cite: _____
4. Waste Condition Upon Generation: ☐ Solid ☒ Semi-solid ☐ Liquid ☐ Other Cured dust from dust collectors
5. Waste Treatment Description: Uncured waste material is cured by heat to drive off any free emissions. Dust emissions have been cured during manufacturing process.
6. Disposal Site Name: Tri-K Landfill 7. Permit # 069.04
8. Waste Condition Upon Disposal: ☐ Solid ☒ Semi-solid ☐ Liquid ☐ Other Dust
9. Waste Amount: 55-gal. drums or 1500 Cubic Yards (Note: 1 cubic yard = 202 gallon)
10. Frequency: ☐ Per Month ☒ Per Year ☐ One-Time Only

C. CONTAINER TYPE(See Instructions):

- ☐ Paper bag ☐ Fiber drum or cardboard box ☐ Metal or plastic drum
☐ Plastic bag ☐ Double bagged in container ☐ Other (specify) _____
☒ Bulk ☒ Mixed with plant trash

D. FEE: Check payable to "KENTUCKY STATE TREASURER." (MAIL CHECK DIRECTLY TO SOLID WASTE BRANCH, DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KENTUCKY 40601)

Check for \$50.00 # CK No. 17973

E. SOLID WASTE GENERATOR CERTIFICATION:

I certify that the information set forth in Section I pertaining to the waste is true and correct and that the waste is not regulated as a hazardous under 401 KAR Chapter 31 which requires storage, treatment or disposal at a hazardous waste facility under 401 KAR Chapters 32 through 34. I understand that failure to properly manage a hazardous waste could lead to possible civil and criminal penalties under KRS Chapter 224 or the Resource Conservation and Recovery Act of 1976, (Public Law 94-580), as amended.

Signature of Authorized Agent: L. Osborne Date: 3/28/89
Name of Authorized Agent (typed or printed): Lynn Osborne Title: Plant Manager

GENERATOR: Allison Abrasives, Inc.

PAGE 3 OF 4

WASTE NAME: Baghouse and Kiln Waste

DATE:

IV. LANDFILL INFORMATION

A. DISPOSAL SITE IDENTIFICATION:

1. Landfill Name: Tri-K Landfill
2. Permit #: 069.04
3. Mailing Address: 3445 Skyline Drive, Stanford, KY 40484-9437
4. Contact Person: Dale Kirkpatrick
5. Telephone: 606/365-7806

B. INSTRUCTIONS TO GENERATOR:

1. Time of Day Waste is to be Delivered: _____
2. Special handling requirements: _____

3. Comments:

C. DISPOSAL METHOD:

- ☐ Bury in container ☒ Co-mix with garbage ☐ Bury at bottom of lift ☐ Per EPA asbestos procedure
☐ Other _____

D. LANDFILL CERTIFICATION:

I certify that I ☐ will ~~not~~ ☒ if approved, will accept the waste described in Section I at the landfill named in Section IV.A. I propose to use the method of disposal described in Section IV.C. above. Failure to use the described, approved procedure may constitute illegal disposal. The waste to be received under this permit modification is compatible to the above mentioned landfill operation.

Signature of Authorized Agent for Landfill:

Richard Beggs

Date:

Mar 28 1991

Name of Authorized Agent (Typed or Printed):

DALE KIRKPATRICK

Title:

OWNER

GENERATOR: ALLISON ABRASIVES, Inc.

PAGE 4 OF 4

WASTE NAME: WASTE GENERATED FROM ABRASIVE GRAINS DATE: 5/24/89

V. DIVISION OF WASTE MANAGEMENT FINAL DETERMINATION

A. GENERAL INFORMATION:

1. Landfill Name: TRI-K LANDFILL 2. County: LINCOLN
3. Landfill Permit #: 069.04 4. Expires: 9-30-90

B. APPROVAL:

On behalf of the Director of the Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, the Division modifies the landfill permit cited in Section IVA of this application to allow disposal of the waste described herein. The Division reserves the right to modify or revoke this approval. This approval is invalid in the absence of a valid permit or if disposal is not in accordance with description herein or conditions described below.

Date: MAY 24, 1989

Shelley C. Jett

Solid Waste Branch Manager
Division of Waste Management

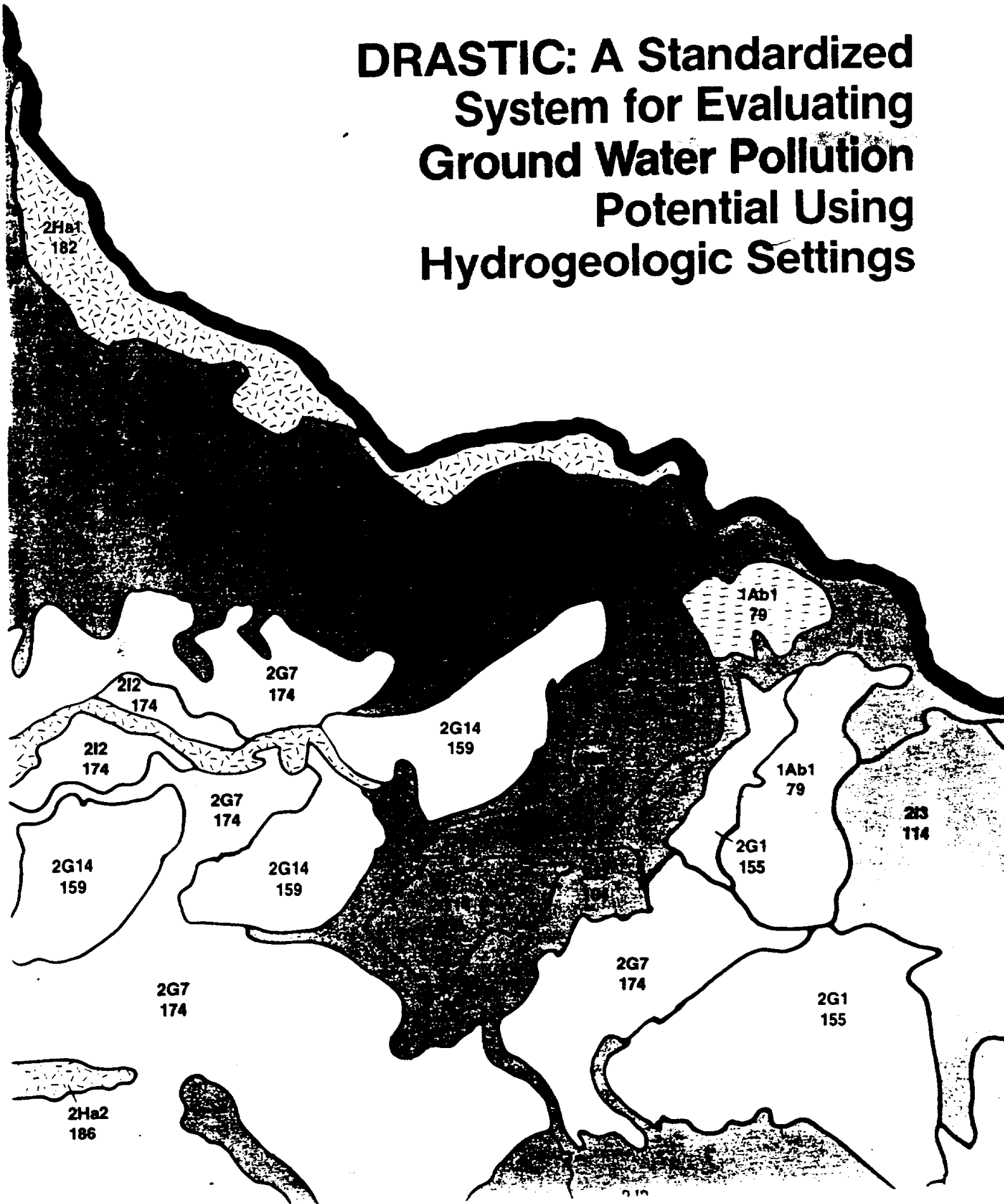
C. DENIAL:

On behalf of the Director of the Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, the Division of Waste Management rejects this application for the reason(s) stated below:

Date: _____

Solid Waste Branch Manager
Division of Waste Management

DRASTIC: A Standardized System for Evaluating Ground Water Pollution Potential Using Hydrogeologic Settings



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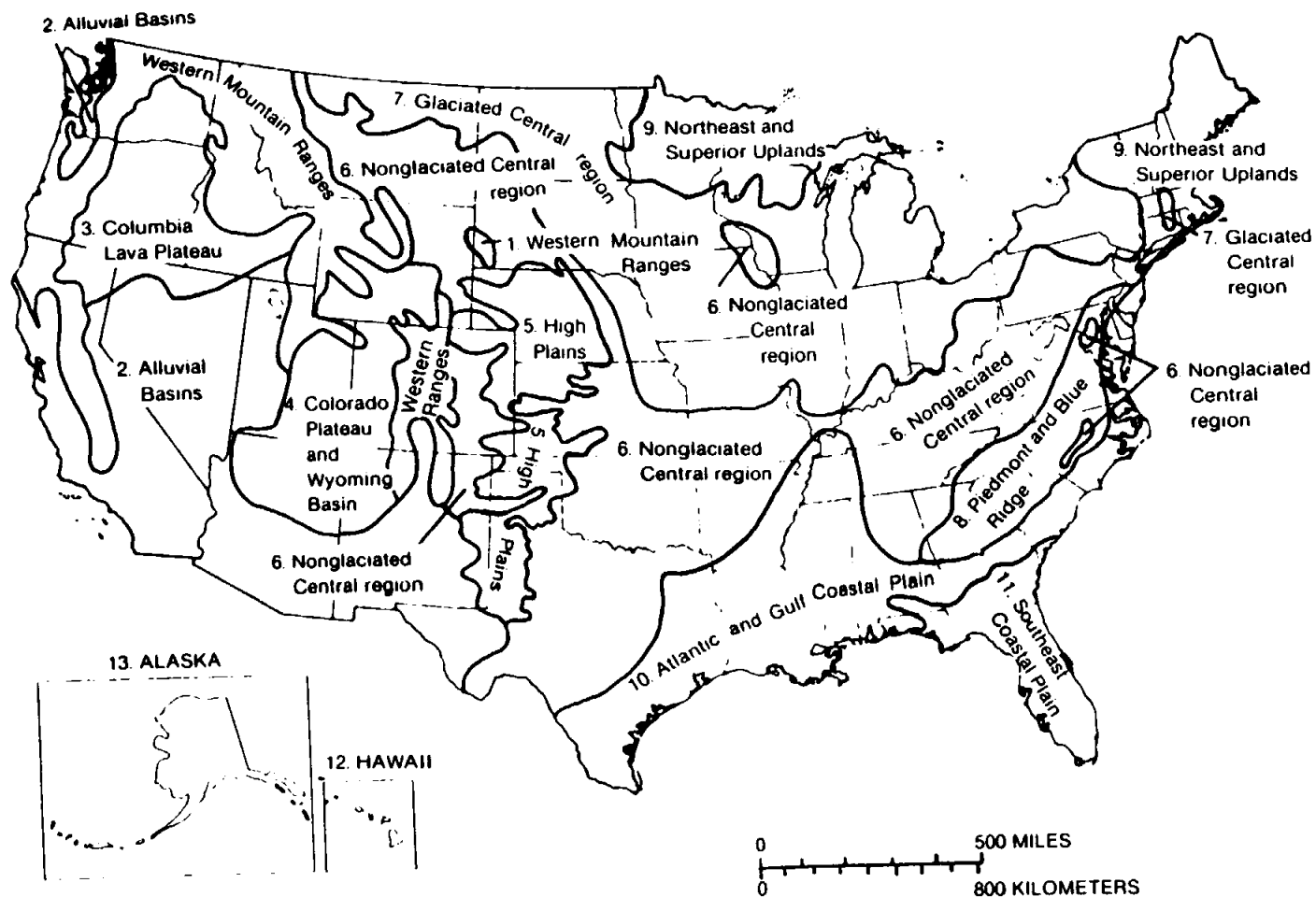
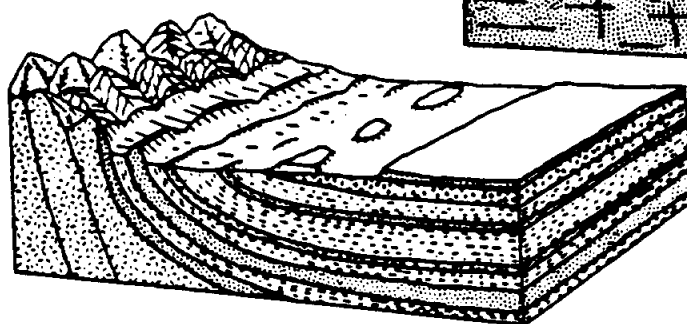
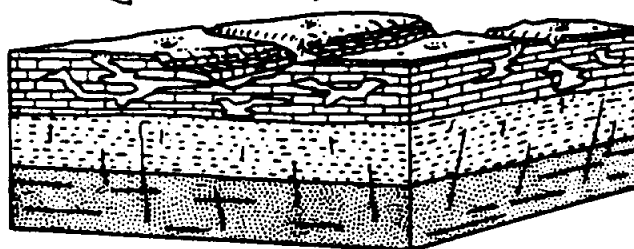
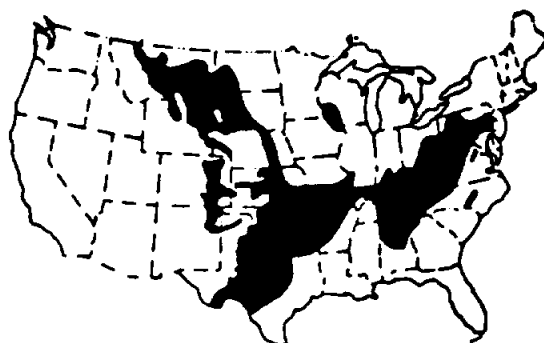


Figure 1. Ground-water regions of the United States (After Heath, 1984).

6. NONGLACIATED CENTRAL GROUND-WATER REGION



- 6A Mountain Slopes
- 6B Alluvial Mountain Valleys
- 6C Mountain Flanks
- 6Da Alternating Sandstone, Limestone and Shale - Thin Soil
- 6Db Alternating Sandstone, Limestone and Shale - Deep Regolith
- 6E Solution Limestone
- 6Fa River Alluvium With Overbank Deposits
- 6Fb River Alluvium Without Overbank Deposits
- 6G Braided River Deposits
- 6H Triassic Basins
- 6I Swamp/Marsh
- 6J Metamorphic/Igneous Domes and Fault Blocks
- 6K Unconsolidated and Semi-consolidated Aquifers

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6. NONGLACIATED CENTRAL REGION

(Thin regolith over fractured sedimentary rocks)

The nonglaciaded Central region is an area of about 1,737,000 km² extending from the Appalachian Mountains on the east to the Rocky Mountains on the west. The part of the region in eastern Colorado and northeastern New Mexico is separated from the remainder of the region by the High Plains region. The Nonglaciaded Central region also includes the Triassic Basins in Virginia and North Carolina and the "driftless" area in Wisconsin, Minnesota, Iowa, and Illinois where glacial deposits, if present, are thin and of no hydrologic importance. The region is a topographically complex area that ranges from the Valley and Ridge section of the Appalachian Mountains on the east westward across the Great Plains to the foot of the Rocky Mountains. It includes, among other hilly and mountainous areas, the Ozark Plateaus in Missouri and Arkansas. Altitudes range from 150 m above sea level in central Tennessee and Kentucky to 1,500 m along the western boundary of the region.

The region is also geologically complex. Most of it is underlain by consolidated sedimentary rocks that range in age from Paleozoic to Tertiary and consist largely of sandstone, shale, carbonate rocks (limestone and dolomite), and conglomerate. A small area in Texas and western Oklahoma is underlain by gypsum. Throughout most of the region the rock layers are horizontal or gently dipping. Principal exceptions are the Valley and Ridge section of the Wichita and Arbuckle Mountains in Oklahoma, and the Ouachita Mountains in Oklahoma and Arkansas, in all of which the rocks have been folded and extensively faulted. Around the Black Hills and along the eastern side of the Rocky Mountains the rock layers have been bent up sharply toward the mountains and truncated by erosion. The Triassic Basins in Virginia and North Carolina are underlain by moderate to gently dipping beds of shale and sandstone that have been extensively faulted and invaded by narrow bodies of igneous rock. These basins were formed in Triassic time when major faults in the crystalline rocks of the Piedmont resulted in the formation of structural depressions up to several thousand meters deep and more than 25 km wide and 140 km long.

The land surface in most of the region is underlain by regolith formed by chemical and mechanical breakdown of the bedrock. In the western part of the Great Plains the residual soils are overlain by or intermixed with eolian (wind-laid) deposits. The thickness and composition of the regolith depend on the composition and structure of the parent rock and on the climate, land cover, and topography. In areas underlain by relatively pure limestone, the regolith consists mostly of clay and is generally only a few meters thick. Where the limestones contain chert and in areas underlain by shale and sandstone, the regolith is thicker, up to 30 m or more in some areas. The

chert and sand form moderately permeable soils, whereas the soils developed on shale are finer grained and less permeable.

The principal water-bearing openings in the bedrock are fractures along which the rocks have been broken by stresses imposed on the Earth's crust at different times since the rocks were consolidated. The fractures generally occur in three sets. The first set, and the one that is probably of greatest importance from the standpoint of ground water and well yields, consists of fractures developed along the contact between different rock layers, in other words, along bedding planes. Where the sedimentary layers making up the bedrock are essentially horizontal, the bedding-plane fractures are more or less parallel to the land surface. The two remaining sets of fractures are essentially vertical and thus cross the bedding planes at a steep angle. The primary difference between the sets of vertical fractures is in the orientation of the fractures in each set. For example, in parts of the region one set of vertical fractures is oriented in a northwest-southeast direction and the other set in a northeast-southwest direction. The vertical fractures facilitate movement of water across the rock layers and thus serve as the principal hydraulic connection between the bedding-plane fractures.

In the parts of the region in which the bedrock has been folded or bent, the occurrence and orientation of fractures are more complex. In these areas the dip of the rock layers and the associated bedding-plane fractures range from horizontal to vertical. Fractures parallel to the land surface, where present, are probably less numerous and of more limited extent than in areas of flat-lying rocks.

The openings developed along most fractures are less than a millimeter wide. The principal exception occurs in limestones and dolomites, which are more soluble in water than most other rocks. Water moving through these rocks gradually enlarges the fractures to form, in time, extensive cavernous openings or cave systems. Many large springs emerge from these openings; one in this region is Big Spring, in Missouri, which has an average discharge of $36.8 \text{ m}^3 \text{ sec}^{-1}$.

Recharge of the ground-water system in this region occurs primarily in the outcrop areas of the bedrock aquifers in the uplands between streams. Precipitation in the region ranges from about 400 mm per year in the western part to more than 1,200 mm in the eastern part. This wide difference in precipitation is reflected in recharge rates, which range from about 5 mm per year in west Texas and New Mexico to as much as 500 mm per year in Pennsylvania and eastern Tennessee. Discharge from the ground-water system is by springs and seepage into streams and by evaporation and transpiration in areas where the water table is within a few meters of land surface.

The yield of wells depends on (1) the number and size of fractures that are penetrated and the extent to which they have been enlarged by solution, (2) the rate of recharge, and (3) the storage capacity of the bedrock and regolith. Yields of wells in most of the region are small, in the range of 0.01 to $1 \text{ m}^3 \text{ min}^{-1}$ (about 2.5 to about 250 gallons per minute), making the Nonglaciated Central region one of the least favorable ground-water regions in the

country. Even in parts of the areas underlain by cavernous limestone, yields are moderately low because of both the absence of a thick regolith and the large water-transmitting capacity of the cavernous openings which quickly discharge the water that reaches them during periods of recharge.

The exceptions to the small well yields are the cavernous limestones of the Edwards Plateau, the Ozark Plateaus, and the Ridge and Valley section. The Edwards Plateau in Texas is bounded on the south by the Balcones Fault Zone, in which limestone and dolomite up to 150 m in thickness has been extensively faulted. The faulting has facilitated the development of solution openings which makes this zone one of the most productive aquifers in the country. Wells of the City of San Antonio are located in this zone; individually, they have yields of more than 60 m³min⁻¹.

Another feature that makes much of this region unfavorable for ground-water development is the occurrence of salty water at relatively shallow depths. In most of the Nonglaciaded Central region, except the Ozark Plateaus, the Ouachita and Arbuckle Mountains, and the Ridge and Valley section, the water in the bedrock contains more than 1,000 mg/l of dissolved solids at depths less than 150 m. Most of the salty water is believed to be connate--that is, it was trapped in the rocks when they emerged from the sea in which they were deposited. Other possible sources include: (1) seawater that entered the rocks during a later time when the land again was beneath the sea and (2) salty water derived from solution of salt beds that underlie parts of the region.

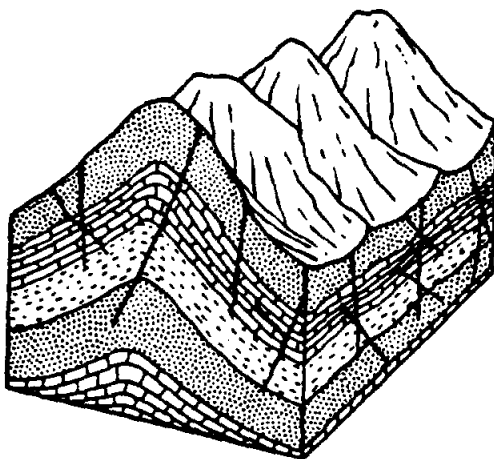
The presence of connate water at relatively shallow depths is doubtless due to several factors, including, in the western part of the area, a semiarid climate and, consequently, a small rate of recharge. Other factors probably include an extremely slow rate of ground-water circulation at depths greater than a few hundred meters.

NON-GLACIATED CENTRAL

(6A) Mountain Slopes

This hydrogeologic setting is characterized by relatively steep slopes on the side of mountains or hills, a thin soil cover and fractured bedrock. Ground water is obtained primarily from the fractures in the bedrock which may be of sedimentary, metamorphic or igneous origin but which are commonly alternating sedimentary layers, and also from bedding planes between the sedimentary layers. The fractures provide only localized sources of ground water and well yields are typically limited. Although precipitation may be significant in some areas, due to the steep slopes, thin soil cover and small storage capacity of the fractures, runoff is significant and ground-water recharge is low. Water levels are extremely variable but are commonly moderately deep. Perched ground-water zones are common.

These sedimentary rocks may range in attitude from nearly horizontal, as in parts of the western Appalachian Plateau, to steeply dipping, as seen in the Valley and Ridge province, the Wichita, Arbuckle and Ouachita Mountains, the Black Hills, and on the eastern slopes of the Rockies.



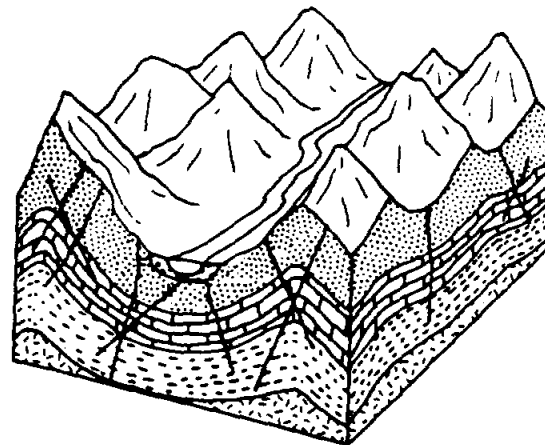
SETTING 6 A Mountain Slopes		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	30-50	5	5	25
Net Recharge	0-2	4	1	4
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Thin or Absent	2	10	20
Topography	12-18%	1	3	3
Impact Vadose Zone	Bedded LS, SS, SH	5	6	30
Hydraulic Conductivity	1-100	3	1	3
Drastric Index				103

SETTING 6 A Mountain Slopes		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	30-50	5	5	25
Net Recharge	0-2	4	1	4
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Thin or Absent	5	10	50
Topography	12-18%	3	3	9
Impact Vadose Zone	Bedded LS, SS, SH	4	6	24
Hydraulic Conductivity	1-100	2	1	2
Pesticide Drastric Index				132

NON-GLACIATED CENTRAL

(6B) Alluvial Mountain Valleys

This hydrogeologic setting is characterized by thin boulder alluvium which overlies fractured bedrock of sedimentary, metamorphic or igneous origin but which is commonly comprised of alternating sedimentary layers. The alluvium, which is derived from the surrounding slopes serves as a localized source of water. Water is obtained from sand and gravel layers which are interspersed between finer-grained deposits. Surficial deposits have typically weathered to a sandy loam. Water levels are relatively shallow but may be extremely variable. Ground water may also be obtained from the fractures in the underlying bedrock which are typically in direct hydraulic connection with the overlying alluvium.



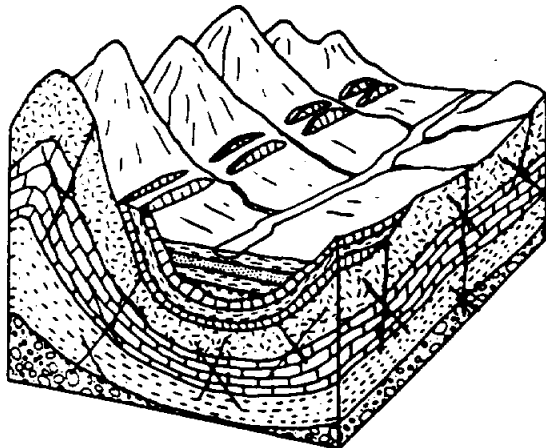
SETTING 6 B Alluvial Mountain Valleys		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	15-30	5	7	35
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Sandy Loam	2	6	12
Topography	2-6%	1	9	9
Impact Vadose Zone	S & G w/ silt. Silt and Clay	5	6	30
Hydraulic Conductivity	700-1000	3	6	18
Drastric Index				152

SETTING 6 B Alluvial Mountain Valleys		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	15-30	5	7	35
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Sandy Loam	5	6	30
Topography	2-6%	3	9	27
Impact Vadose Zone	S & G w/ silt. Silt and Clay	4	6	24
Hydraulic Conductivity	700-1000	2	6	12
Pesticide Drastric Index				176

NON-GLACIATED CENTRAL

(6C) Mountain Flanks

This hydrogeologic setting is characterized by moderate topographic relief and moderately-dipping, fractured, consolidated, sedimentary rocks. Soil cover is usually thicker than on the mountain slopes and typically has weathered to a sandy loam. Although precipitation can be significant, ground-water recharge is only moderate due to the slope. Water levels are typically moderately deep although they are extremely variable. The mountain flanks serve as the recharge area for aquifers which are confined in adjacent areas. Ground water is obtained from the permeable sedimentary rocks or from fractures in the sedimentary rocks. The sedimentary rocks may be underlain by fractured bedrock of igneous, metamorphic or sedimentary origin which yield little water. Sedimentary beds may be either horizontal or dipping, as indicated for the higher mountain slopes (6A), and have a similar geographic distribution.



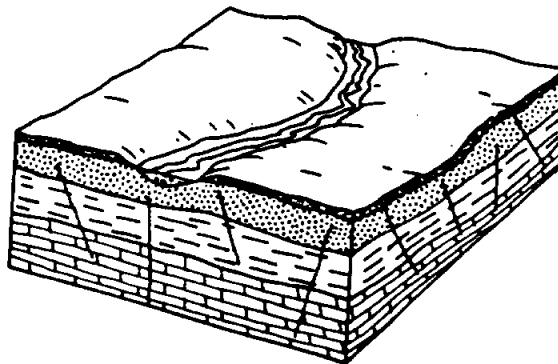
SETTING 6 C Mountain Flanks		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	10-50	5	5	25
Net Recharge	2-4	4	3	12
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Sandy Loam	2	6	12
Topography	6-12%	1	5	5
Impact Vadose Zone	Bedded LS, SS, SH	5	6	30
Hydraulic Conductivity	1-100	3	1	3
Dramatic Index				105

SETTING 6 C Mountain Flanks		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	10-50	5	5	25
Net Recharge	2-4	4	3	12
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Sandy Loam	5	6	30
Topography	6-12%	3	5	15
Impact Vadose Zone	Bedded LS, SS, SH	4	6	24
Hydraulic Conductivity	1-100	2	1	2
Pesticide Dramatic Index				126

NON-GLACIATED CENTRAL

(6Da) Alternating Sandstone, Limestone and Shale - Thin Soil

This hydrogeologic setting is characterized by low to moderate topographic relief, relatively thin loamy soils overlying horizontal or slightly dipping alternating layers of fractured consolidated sedimentary rocks. Ground water is obtained primarily from fractures along bedding planes or intersecting vertical fractures. Precipitation varies widely in the region, but recharge is moderate where precipitation is adequate. Water levels are extremely variable but on the average moderately shallow. Shale or clayey layers often form aquitards, and where sufficient relief is present, perched ground water zones of local domestic importance are often developed.



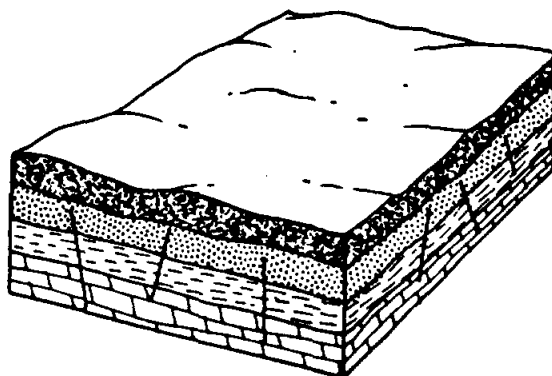
SETTING 6 Da Alternating Sandstone, Limestone, Shale - Thin Soil		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	15-30	5	7	35
Net Recharge	4-7	4	6	24
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Thin or Absent	2	10	20
Topography	2-6%	1	9	9
Impact Vadose Zone	Bedded LS, SS, SH	5	6	30
Hydraulic Conductivity	1-100	3	1	3
Dramatic Index				139

SETTING 6 Da Alternating Sandstone, Limestone, Shale - Thin Soil		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	15-30	5	7	35
Net Recharge	4-7	4	6	24
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Thin or Absent	5	10	50
Topography	2-6%	3	9	27
Impact Vadose Zone	Bedded LS, SS, SH	4	6	24
Hydraulic Conductivity	1-100	2	1	2
Pesticide Dramatic Index				180

NON-GLACIATED CENTRAL

(6Db) Alternating Sandstone, Limestone and Shale - Deep Regolith

This setting is identical to (6Da) Alternating Sandstone, Limestone and Shale - Thin Soil except that the surficial deposits typically have been weathered to form clay loams which grade into weathered bedrock. This weathered zone helps retard the movement of pollutants through the ground to the water table. These thick soil deposits are usually in direct, hydraulic connection with the underlying fractured sedimentary deposits.



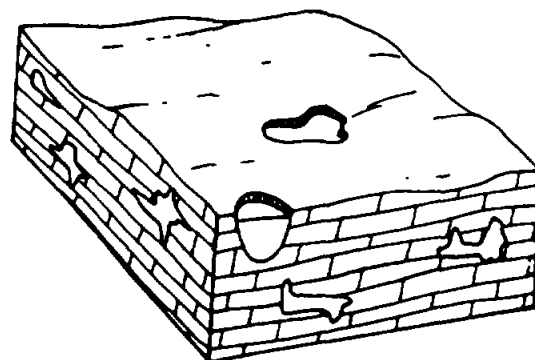
SETTING 6 Db Alternating Sandstone, Limestone, Shale - Deep Regolith		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	15-30	5	7	35
Net Recharge	4-7	4	6	24
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Clay Loam	2	3	6
Topography	2-6%	1	9	9
Impact Vadose Zone	Bedded LS, SS, SH	5	6	30
Hydraulic Conductivity	1-100	3	1	3
Drastic Index				125

SETTING 6 Db Alternating Sandstone, Limestone, Shale - Deep Regolith		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	15-30	5	7	35
Net Recharge	4-7	4	6	24
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Clay Loam	5	3	15
Topography	2-6%	3	9	27
Impact Vadose Zone	Bedded LS, SS, SH	4	6	24
Hydraulic Conductivity	1-100	3	1	3
Pesticide Drastic Index				145

NON-GLACIATED CENTRAL

(6E) Solution Limestone

This hydrogeologic setting is characterized by moderate, but variable, topographic relief and deposits of limestone which have been partially dissolved along bedding and fracture planes to form a network of solution cavities and caves. Soil is usually thin or absent, but where present is commonly a clayey loam. Recharge is usually greater than 10 inches per year because the region receives significant amounts of rainfall which is easily recharged through the solution channels. Runoff return through solution channels into surface watercourses is sometimes very high. Water levels are typically moderately deep. The limestone serves as a significant source of ground water because of the high hydraulic conductivity of the solution channels. Caves related to this setting are widespread, but their greatest concentration occurs in a band 200-400 miles wide extending from central Missouri through western Virginia.



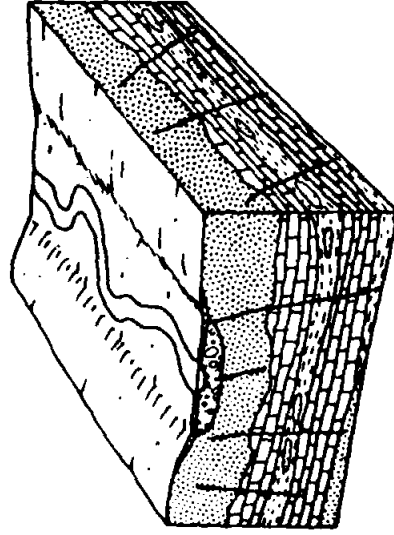
SETTING 6 E Solution Limestone		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	30-50	5	5	25
Net Recharge	10+	4	9	36
Aquifer Media	Karst Limestone	3	10	30
Soil Media	Thin or Absent	2	10	20
Topography	6-12%	1	5	5
Impact Vadose Zone	Karst Limestone	5	10	50
Hydraulic Conductivity	2000+	3	10	30
Drastic Index				196

SETTING 6 E Solution Limestone		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	30-50	5	5	25
Net Recharge	10+	4	9	36
Aquifer Media	Karst Limestone	3	10	30
Soil Media	Thin or Absent	5	10	50
Topography	6-12%	3	5	15
Impact Vadose Zone	Karst Limestone	4	10	40
Hydraulic Conductivity	2000+	3	10	30
Pesticide Drastic Index				216

NON-GLACIATED CENTRAL

6Fa) River Alluvium with Overbank Deposits

This hydrogeologic setting is characterized by low overbank deposits of alluvium along parts of stream channels and deposits of alluvium along parts of stream channels. It is obtained from sand and gravel layers in floodplain areas with finer-grained alluvial deposits. The floodplain is covered by varying thicknesses of fine-grained silt and clay called overbank deposits. The overbank thickness is usually thicker along major streams (as much as 40 feet), and thinner along minor streams. Precipitation varies widely over the region, but is somewhat reduced because of the impermeable nature of the overbank deposits and subsequent clayey loam soils which typically cover the surface. There is usually substantial recharge, however, due to infiltration from the unconfined stream. Water levels are typically moderately low. The alluvium is commonly in direct hydraulic connection with the underlying sedimentary rocks.



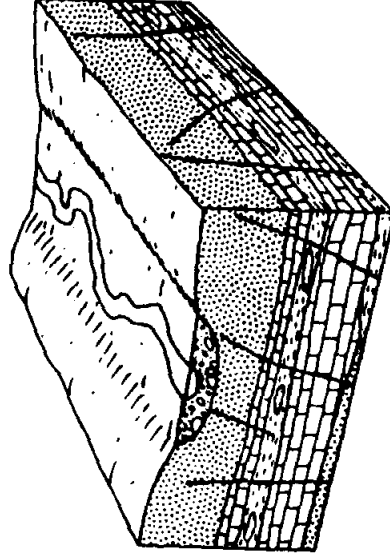
SETTING 6 Fa River Alluvium with Overbank Deposits				GENERAL	
FEATURE	RANGE	WEIGHT	RATING	NUMBER	
Depth to Water	15-30	5	7	35	
Net Recharge	7-10	4	8	32	
Aquifer Media	Sand and Gravel	3	8	24	
Soil Media	Clay Loam	2	3	6	
Topography	0-2%	1	10	10	
Impact Vadose Zone	Silt/Clay	5	3	15	
Hydraulic Conductivity	1000-2000	3	8	24	
DRASTIC INDEX					126

SETTING 6 Fa River Alluvium with Overbank Deposits				PESTICIDE	
FEATURE	RANGE	WEIGHT	RATING	NUMBER	
Depth to Water	15-30	5	7	35	
Net Recharge	7-10	4	8	32	
Aquifer Media	Sand and Gravel	3	8	24	
Soil Media	Clay Loam	5	3	15	
Topography	0-2%	3	10	30	
Impact Vadose Zone	Silt/Clay	4	3	12	
Hydraulic Conductivity	1000-2000	2	8	16	
Pesticide Drastic Index					166

NON-GLACIATED CENTRAL

(6Fb) River Alluvium without Overbank Deposits

This setting is identical to (6Fa) River Alluvium with Overbank Deposits except that no significant fine-grained floodplain deposits occupy the stream valley. This results in significantly higher recharge where precipitation is adequate and sandy loam soils occur at the surface. Water levels are typically closer to the surface because the fine-grained overbank deposits are not present.



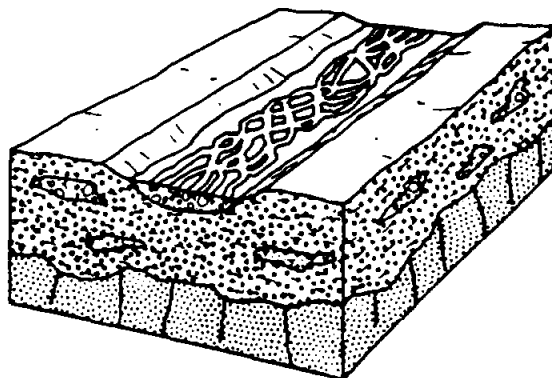
SETTING 6 Fb River Alluvium without Overbank Deposits				GENERAL	
FEATURE	RANGE	WEIGHT	RATING	NUMBER	
Depth to Water	5-15	5	9	45	
Net Recharge	7-10	4	8	32	
Aquifer Media	Sand and Gravel	3	8	24	
Soil Media	Sandy Loam	2	6	12	
Topography	0-2%	1	10	10	
Impact Vadose Zone	Sand and Gravel	5	8	40	
Hydraulic Conductivity	1000-2000	3	8	24	
DRASTIC INDEX					187

SETTING 6 Fb River Alluvium without Overbank Deposits				PESTICIDE	
FEATURE	RANGE	WEIGHT	RATING	NUMBER	
Depth to Water	5-15	5	9	45	
Net Recharge	7-10	4	8	32	
Aquifer Media	Sand and Gravel	3	8	24	
Soil Media	Sandy Loam	5	6	30	
Topography	0-2%	3	10	30	
Impact Vadose Zone	Sand and Gravel	4	8	32	
Hydraulic Conductivity	1000-2000	2	8	16	
Pesticide Drastic Index					209

NON-GLACIATED CENTRAL

(6G) Braided River Deposits

This hydrogeologic setting is characterized by deposits of alluvium which occur within the flood plain of streams and rivers. The stream is characterized by a low gradient, wide channel and series of interconnected shallow channels which form a braided pattern. Water levels are typically shallow. This setting is found only in the western portion of this ground-water region. The river alluvium does not serve as a significant source of ground water where it overlies more productive semi-consolidated deposits. However, recharge from the river is substantial and the underlying deposits are in direct hydraulic connection with the overlying alluvium; therefore the potential for pollution of the aquifer is high. Although precipitation commonly averages less than 20 inches per year, recharge is relatively high due to the flat topography and sandy surficial deposits.



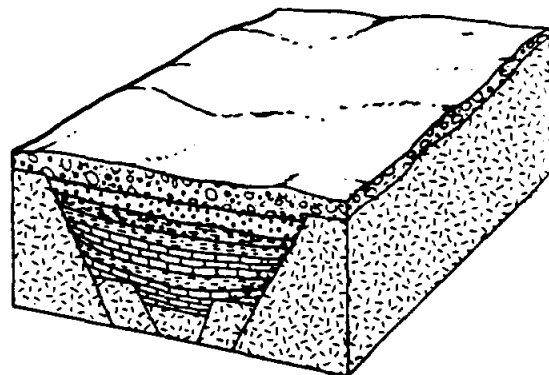
SETTING 6 G Braided River Deposits		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	0-5	5	10	50
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Sand	2	9	18
Topography	0-26	1	10	10
Impact Vadose Zone	Sand and Gravel	5	8	40
Hydraulic Conductivity	1000-2000	3	8	24
Draestic Index				190

SETTING 6 G Braided River Deposits		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	0-5	5	10	50
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Sand	5	9	45
Topography	0-26	3	10	30
Impact Vadose Zone	Sand and Gravel	4	8	32
Hydraulic Conductivity	1000-2000	2	8	16
Pesticide Draestic Index				221

NON-GLACIATED CENTRAL

(6H) Triassic Basins

This hydrogeologic setting is characterized by moderate dipping, highly faulted beds of sandstone, shale and limestone. Conglomeratic deposits occur in some areas. These basins tend to be bounded by high angle faults, the basins being elongate in the NE-SW directions. The sedimentary beds may be cut by narrow igneous intrusions (dikes, etc.), and are sometimes indurated by the intrusion activity. The Triassic formations are often red in color due to high iron concentrations, but green colors are common. These deposits may serve as a localized source of water and water levels are variable.



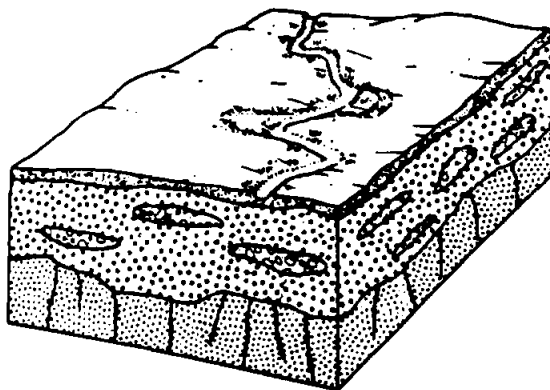
SETTING 6 H Triassic Basins		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	75-100	5	2	10
Net Recharge	4-7	4	6	24
Aquifer Media	Massive Sandstone	3	6	18
Soil Media	Sandy Loam	2	6	12
Topography	2-66	1	9	9
Impact Vadose Zone	Bedded LS, SS, SH	5	6	30
Hydraulic Conductivity	1-100	3	1	3
Draestic Index				101

SETTING 6 H Triassic Basins		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	75-100	5	2	10
Net Recharge	4-7	4	6	24
Aquifer Media	Massive Sandstone	3	6	18
Soil Media	Sandy Loam	5	6	30
Topography	2-66	3	9	27
Impact Vadose Zone	Bedded LS, SS, SH	4	6	24
Hydraulic Conductivity	1-100	2	1	2
Pesticide Draestic Index				121

NON-GLACIATED CENTRAL

(6I) Swamp/Marsh

This hydrogeologic setting is characterized by low topographic relief and high water levels with high organic content in the sandy clay deposits. The high water tables are a result of either restricted vertical conductivity or restricted drainage patterns. Recharge is highly variable but is typically moderate to high where precipitation and/or streamflow permit. These deposits may serve as aquifers or may serve as recharge to the underlying aquifer.



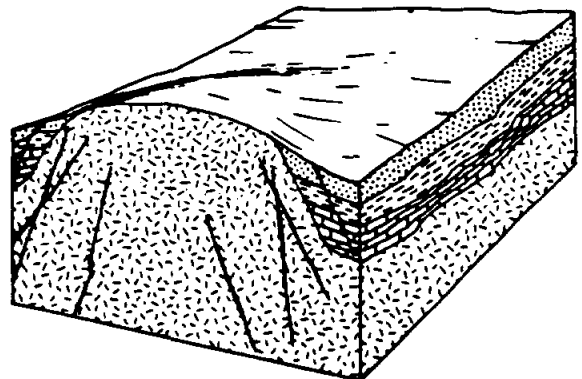
SETTING 6 I Swamp/Marsh		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	0-1	5	10	50
Net Recharge	4-7	4	6	24
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Clay Loam	2	3	6
Topography	0-2	1	10	10
Impact Vadose Zone	S & G w/fin. Silt and Clay	5	6	30
Hydraulic Conductivity	100-300	3	2	6
Drastic Index				144

SETTING 6 I Swamp/Marsh		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	0-5	5	10	50
Net Recharge	4-7	4	6	24
Aquifer Media	Bedded SS, LS, SH Sequences	3	6	18
Soil Media	Clay Loam	5	3	15
Topography	0-2	3	10	30
Impact Vadose Zone	S & G w/fin. Silt and Clay	4	6	24
Hydraulic Conductivity	100-300	2	2	4
Pesticide Drastic Index				165

NON-GLACIATED CENTRAL

(6J) Metamorphic/Igneous Domes and Fault Blocks

This hydrogeologic setting is characterized by metamorphic and igneous rocks exposed at the surface. The rocks are typically more highly fractured and faulted along the flanks of the domes. The domes are flanked by gently dipping deposits of sedimentary rocks which may also be faulted adjacent to the dome. Soil is typically thin or absent and water levels are extremely variable. Recharge rates are typically low because of excessive surface runoff and low permeabilities. Water yields are extremely variable depending on the degree of folding and faulting but typically are higher along the more fractured flank zones. Where few fractures exist, water yields are very low or non-existent.



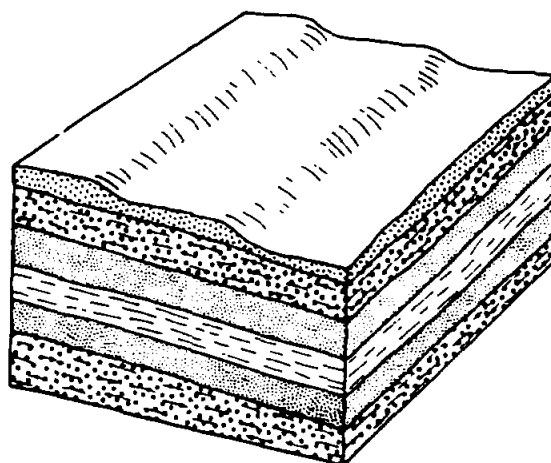
SETTING 6 J Metamorphic/Igneous Domes and Fault Blocks		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	75-100	5	2	10
Net Recharge	0-2	4	1	4
Aquifer Media	Metamorphic/Igneous	3	3	9
Soil Media	Thin or Absent	2	10	20
Topography	6-12	1	5	5
Impact Vadose Zone	Metamorphic/Igneous	5	4	20
Hydraulic Conductivity	1-100	3	1	3
Drastic Index				71

SETTING 6 J Metamorphic/Igneous Domes and Fault Blocks		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water Table	75-100	5	2	10
Net Recharge	0-2	4	1	4
Aquifer Media	Metamorphic/Igneous	3	3	9
Soil Media	Thin or Absent	5	10	50
Topography	6-12	1	5	5
Impact Vadose Zone	Metamorphic/Igneous	4	4	16
Hydraulic Conductivity	1-100	2	1	2
Pesticide Drastic Index				96

NON-GLACIATED CENTRAL

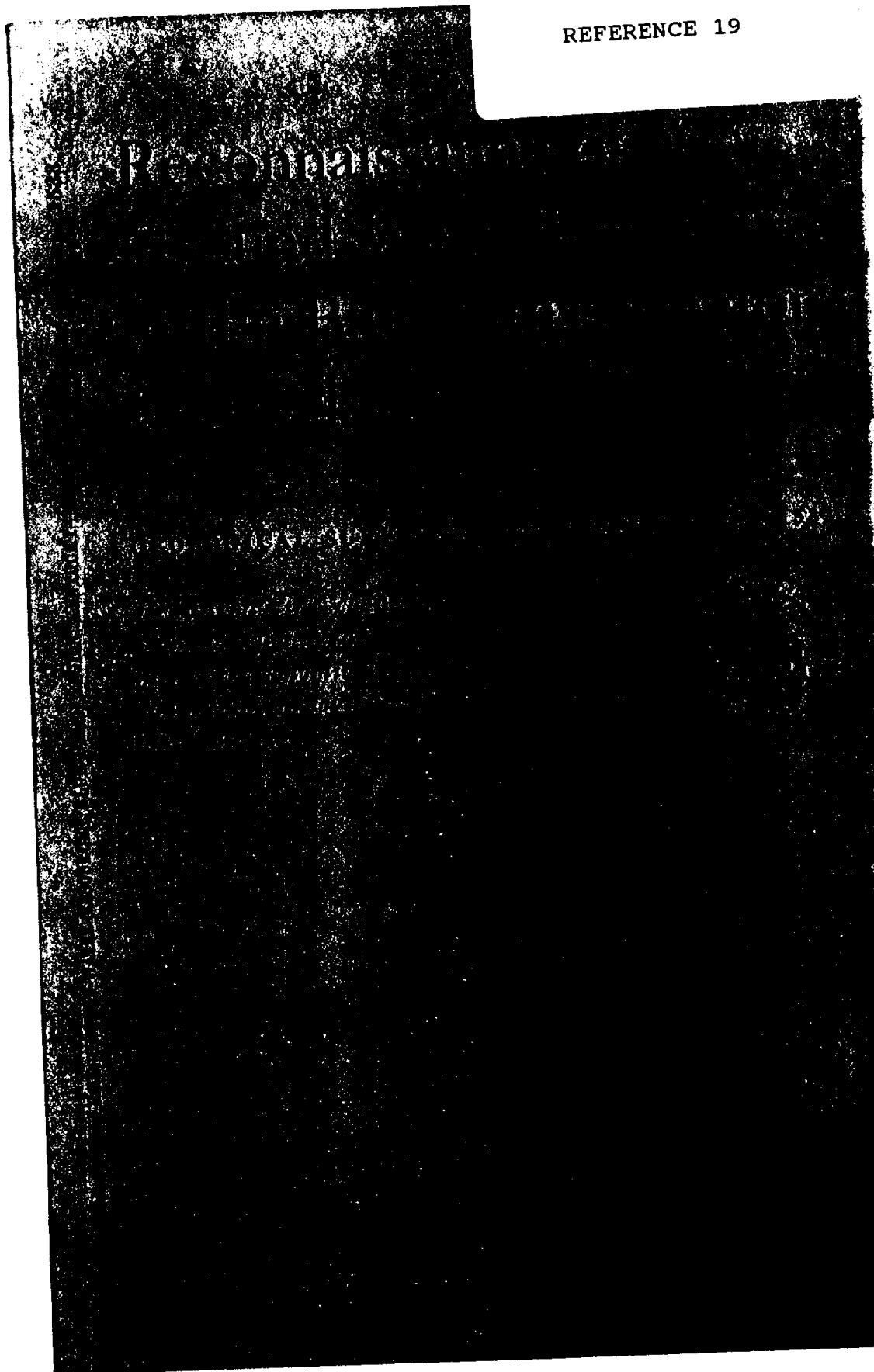
(6K) Unconsolidated and Semi-Consolidated Aquifers

This hydrogeologic setting is characterized by moderately low topographic relief and interbedded deposits which consist primarily of sand, silt and clay. Although soils are typically loamy or sandy, recharge is limited because of only moderate precipitation and high evapotranspiration. Water levels are extremely variable but are typically not less than 50 feet. Hydraulic conductivities are also extremely variable also depending on the amount of fine materials which are interbedded with the sands.



SETTING 6 K Unconsolidated and Semi-Consolidated Aquifers		GENERAL		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water	75-100	5	2	10
Net Recharge	0-2	4	1	4
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Sandy Loam	2	6	12
Topography	2-65	1	9	9
Impact Vadose Zone	S&G w/sls. Silt & Clay	5	6	30
Hydraulic Conductivity	300-700	3	4	12
Drastic Index				101

SETTING 6 K Unconsolidated and Semi-Consolidated Aquifers		PESTICIDE		
FEATURE	RANGE	WEIGHT	RATING	NUMBER
Depth to Water Table	75-100	5	2	10
Net Recharge	0-2	4	1	4
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Sandy Loam	5	6	30
Topography	2-65	1	9	9
Impact Vadose Zone	S&G w/sls. Silt & Clay	4	6	24
Hydraulic Conductivity	300-700	2	4	8
Pesticide Drastic Index				109



Reconnaissance of Ground-Water Resources in the Blue Grass Region Kentucky

By W. N. PALMQUIST, JR., and F. R. HALL

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1533

*Prepared in cooperation with the
Commonwealth of Kentucky, Depart-
ment of Economic Development and the
Kentucky Geological Survey, University
of Kentucky*



UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1961

RECONNAISSANCE OF GROUND-WATER RESOURCES IN THE BLUE GRASS REGION, KENTUCKY

By W. N. PALMQUIST, JR., and F. R. HALL

ABSTRACT

In the Blue Grass region probably less than half of the attempts to obtain adequate domestic water supplies from wells drilled in bedrock have been successful. The most favorable areas for obtaining ground water in the bedrock are those where thick limestone beds containing little or no shale occur at and below stream level. Areas underlain by shale or interbedded shale and limestone generally are less favorable. In general, more of the wells drilled in valleys are successful than those drilled on ridgetops. Large supplies of ground water can be obtained in many places from the alluvium along the Ohio River, but the alluvium along tributary streams generally is too fine-grained to yield large quantities of water. The water from wells in the Blue Grass region generally is of the calcium bicarbonate type and is hard to very hard. About one-eighth of the wells are reported to yield water containing undesirable amounts of common salt, and about one-fifth of the wells yield water containing noticeable amounts of hydrogen sulfide.

INTRODUCTION

PURPOSE AND SCOPE OF INVESTIGATION

Ground-water investigations in Kentucky are made by the United States Geological Survey in cooperation with the Commonwealth of Kentucky, Department of Economic Development and the Kentucky Geological Survey, University of Kentucky. Investigations under way are of three general types:

1. Detailed investigation of ground-water resources of small areas.
2. Statewide inventory of public and industrial water supplies.
3. Statewide reconnaissance of ground-water resources.

This investigation is of the third type. The chief purpose of this report is to provide general information on the availability of ground water for all uses in the Blue Grass region of Kentucky. The report will serve also to point out areas where further detailed studies are most needed.

Ground-water investigations of the U.S. Geological Survey in Kentucky are under the supervision of G. E. Hendrickson, district geologist.

LOCATION AND EXTENT OF AREA

For convenience in making the ground-water reconnaissances, the State of Kentucky has been divided into five regions of more or less distinctive geology and physiography. These regions are as follows: Eastern Coal Field, Blue Grass region, Mississippian Plateau, Western Coal Field, and Jackson Purchase. The boundaries of the regions are drawn on county lines which approximate but do not coincide exactly with geologic and physiographic boundaries.

The Blue Grass region (fig. 1) comprises 43 counties in the north-

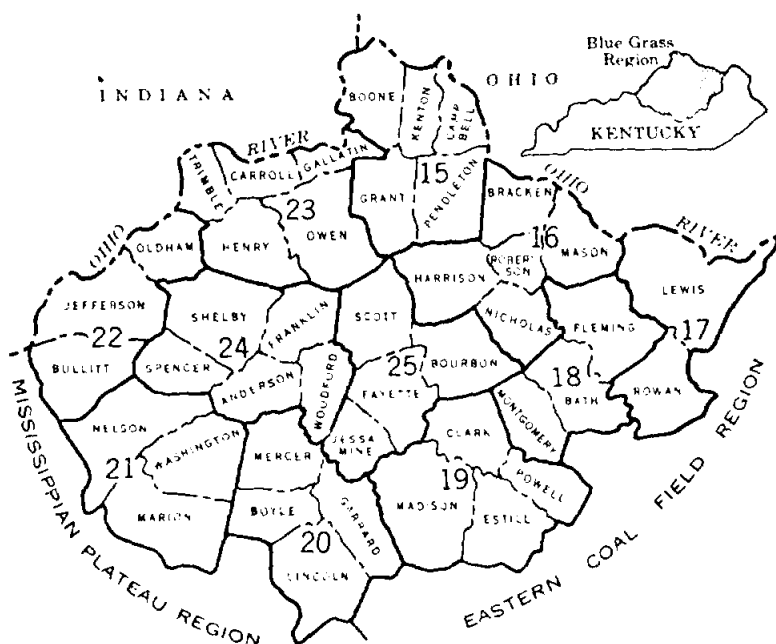


FIGURE 1.—Index map of the Blue Grass region showing counties and county groups.

central part of the State and covers an area of approximately 11,300 square miles. It is bounded on the northeast by the Ohio River and the State of Ohio, on the southeast by the Eastern Coal Field, on the southwest by the Mississippian Plateau, and on the northwest by the Ohio River and the State of Indiana. The population of the 43 counties in 1950 was 1,273,576.

PREVIOUS INVESTIGATIONS

The geology of the Blue Grass region has been described by many authors in publications too numerous to list in this report. "Geology of Kentucky," by A. C. McFarlan (1943), contains a summary of the

stratigraphy, structure, and geology of the region, plus an extended discussion of the present report.

The first systematic study of the geology and occurrence of ground water in the Blue Grass region was made by D. K. Hamilton (1911). A more recent study was made by Covington-Newman (1953). W. N. Newman (1956) in a study of the availability of ground water in the region.

The field work for this report was done during the period January to October 1956. The study was conducted in the Blue Grass region of the State of Kentucky.

An attempt was made to obtain information from the various sources available to the writer. Each source was checked and the information was used in the report. The sources of information are listed in the appendix.

stratigraphy, structure, physiography, and natural resources of the region, plus an extensive bibliography. A list of references cited in the present report appears at the end of the text.

The first systematic study of the occurrence of ground water in Kentucky was made by G. C. Matson (1909), who briefly described the geology and occurrence of ground water in 30 counties of the Blue Grass region. Since 1944, a number of detailed reports dealing with ground-water conditions in the Louisville area have been published. D. K. Hamilton (1950) described the areas and principles of occurrence of ground water in Bourbon, Fayette, Jessamine, and Scott Counties. A reconnaissance of the ground-water resources of the Covington-Newport alluvial area was described by E. H. Walker (1953). W. N. Palmquist, Jr., and F. R. Hall (1953) described public and industrial ground-water supplies of the region. Ground-water conditions in Jefferson County were described by L. M. MacCary (1956) in a report which includes a map showing ground-water availability.

METHOD OF INVESTIGATION

The fieldwork for this report was done by the writers during the period January 1953 to March 1954. Specific-capacity tests on representative wells were made by W. H. Walker from August through October 1954. Fieldwork consisted chiefly of inventorying wells and springs and studying by direct and indirect means the characteristics of the rocks that affect the storage and movement of ground water.

An average of about 35 representative wells and springs was inventoried in each county. An attempt was made to obtain complete information on each such well and spring. Depth of well and depth to water were measured where possible, and the aquifer supplying each well and spring was determined. A report on the permanence and adequacy of the supply was obtained, generally from the owner. Samples of water from representative wells and springs were collected for chemical analysis. Some well logs and samples of drill cuttings were collected, but no attempt was made to obtain all the available logs. Information obtained in the well and spring inventory is summarized by means of well symbols and explanations on availability maps which are published separately in U.S. Geological Survey Hydrologic Investigations Atlases HA 15-25 (see Palmquist and Hall, 1960a-f; and Hall and Palmquist, 1960a-e).

Selected wells in the more important aquifers were pumped to determine their specific capacity. Some of the larger springs were gaged to determine their flow. The resulting data are presented in tables 1 and 2.

Geologic mapping was restricted largely to part of Rowan County, where no geologic map was available. There the geologic boundaries were drawn on the basis of available well logs and a reconnaissance field study. Additional geologic mapping was done in several counties where the existing maps did not distinguish some of the more important water-bearing strata. Most of the geology shown on the maps, however, has been adapted from existing county geologic maps prepared by the Kentucky Geological Survey. The geologic maps are included in U.S. Geological Survey Hydrologic Investigations Atlases HA 15-25 (see Palmquist and Hall, 1960a-f; and Hall and Palmquist, 1960a-e). References to the original county maps appear in the atlases.

ACKNOWLEDGMENTS

The reconnaissance was aided greatly by the cooperation and interest of well owners, well drillers, county agents, and United States Soil Conservation Service employees in the region.

Dr. A. C. McFarlan, former director of the Kentucky Geological Survey, aided materially in the compilation of the stratigraphic correlation chart of the region.

GEOGRAPHY

The Blue Grass region proper consists of the Inner Blue Grass, Eden shale belt, and Outer Blue Grass physiographic subdivisions. However, for the purpose of this report it is defined to include also the Knobs and small parts of the Eastern Coal Field and Mississippian Plateau. Most of the region lies in the Lexington Plain section of the Interior Low Plateaus physiographic province (Fenneman, 1938). Figure 2 shows physiographic subdivisions and the outer limits of the area of this report as determined by county boundaries.

TOPOGRAPHY AND DRAINAGE

The central part of the Blue Grass region as shown in figure 2 coincides, for the most part, with what is known as the Inner Blue Grass and consists of the outcrop areas of the Cynthiana formation (Ordovician) and older Ordovician strata. The area is a gently rolling upland in which the Kentucky River and some of its tributaries are entrenched as much as 300 feet. Most of the rock underlying the area is limestone that has been subjected to considerable erosion by solution, both on and beneath the surface. As a result, much of the drainage is underground. In places the underground drainage comes to the surface to form springs. The area is dotted with sinkholes as much as 60 feet deep and 1 square mile in area.

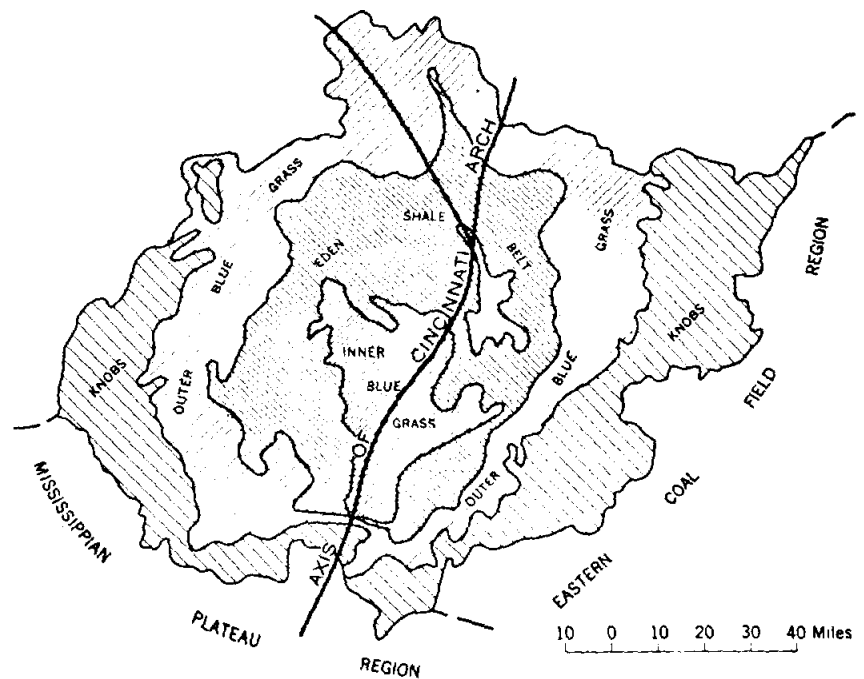


FIGURE 2.—Physiographic subdivisions of the Blue Grass region, Kentucky, and location of the Cincinnati arch.

The Inner Blue Grass is surrounded by a band of dissected, hilly country known as the Eden shale belt. The Eden shale belt consists of the outcrop area of the Eden group of Ordovician age, which is made up mainly of shale and interbedded thin layers of limestone and is characterized by sharp, irregular ridges and narrow valleys. Because of the steep slopes, runoff is rapid, and few perennial streams originate in the Eden shale belt.

The Outer Blue Grass surrounds the Eden shale belt. The Outer Blue Grass consists of the outcrop areas of the Richmond and Maysville groups of Ordovician age and part of the outcrop area of rocks of Silurian age. These rocks are chiefly limestone but include considerable interbedded shale. The topography is gently rolling except near major streams, where it is dissected and rugged. There has been some subsurface solution, and small sinkholes are fairly common, but most of the drainage is on the surface.

Bordering the Outer Blue Grass on the east, south, and west is a belt, known as the Knobs, which is underlain by rocks of Silurian, Devonian, and Early Mississippian ages. The outcrop of Silurian and Devonian rocks west of the Cincinnati arch is gently rolling and more or less continuous with the Outer Blue Grass. East of the arch,

rocks of Silurian and Middle Devonian age underlie long, wide valleys extending into the Knobs. Upper Devonian and Lower Mississippian rocks make up the hillsides and most of the hilltops of the rough, hilly belt of the Knobs proper.

Rocks of Late Mississippian age crop out in the Knobs along the west and south edges of the area. These rocks are outliers of the Mississippian Plateau. Rocks of Early Pennsylvanian age crop out in the Knobs along the east edge of the area, mainly on the tops of hills and ridges. These rocks are outliers of the Eastern Coal Field.

The alluvial terraces of the Ohio River valley lie along the entire north border of the Blue Grass region. The valley is cut about 350 feet below the general level of the adjacent area. The part of the Ohio River valley to be considered in the present report consists of the alluvial terraces on the Kentucky side of the Ohio River. The width of the terraces ranges from zero, where the river impinges on the valley walls, to a maximum of about 5 miles, near Louisville.

The entire Blue Grass region lies within the drainage basin of the Ohio River. The important tributaries of the Ohio that drain the region are the Kentucky, Licking, Salt, Cumberland, and Green Rivers. The Kentucky River drains an area of about 3,700 square miles, or 33 percent of the Blue Grass region as defined. It enters the region in the southeast in Estill County, flows westward to Jessamine County, and then northward to the Ohio River at Carrollton. The Kentucky River is incised as much as 300 feet below the general upland level and has cut a steep, narrow gorge where it crosses the Cincinnati arch. The Licking River enters the area in the east in Rowan County and flows northwestward to the Ohio River at Covington and Newport. It drains 2,900 square miles, or 25 percent of the Blue Grass region. It has cut a valley as much as 300 feet below the upland level, but it has a wider valley and flood plain than the Kentucky River and nowhere is entrenched in a steep, narrow valley. The Salt River heads in Boyle County, flows northward to Anderson County, and thence westward to the Ohio River at West Point, south of Louisville. The Salt River drains about 2,670 square miles, or 24 percent of the area. About 160 square miles in Lincoln County in the extreme southern part of the region is drained by the Cumberland and Green Rivers, which join the Ohio River in western Kentucky. A narrow strip of land along the Ohio River is drained by small directly tributary streams.

The subsurface drainage pattern is composed of many small independent units much like the surface drainage, which is made up of many small watersheds. In areas underlain by limestone, subsurface

drainage courses may deviate locally from the surface drainage. Such deviations usually are evident from discontinuities in the surface drainage pattern.

CLIMATE

The climate of the Blue Grass region is of the humid continental type, with sharp contrasts between the winter and summer. The mean annual temperature ranges from 53° to 57° F., 55° F. being about average for the region. The mean January temperature ranges from 32° to 37° F. and averages about 34° F. The mean July temperature ranges from 75° to 78° F. and averages about 76° F. The growing season is about 180 days. The mean annual precipitation ranges from 39 to 47 inches and averages about 43 inches. Precipitation is rather evenly distributed throughout the year, there being sufficient rain during the growing season in most years to cause crops to mature. The spring months sometimes have enough rain to produce floods; yet, in contrast, drought conditions occasionally prevail for several weeks during the summer.

Figure 3 consists of two graphs showing the monthly temperature and precipitation averaged for 10 stations in the Blue Grass region.

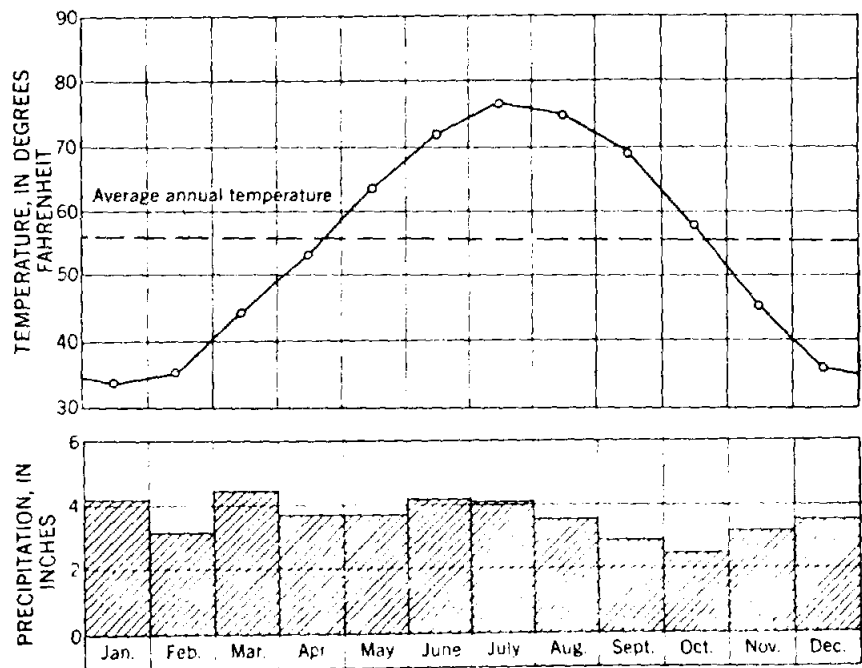


FIGURE 3.—Monthly temperature and precipitation averaged from normals for 10 stations in the Blue Grass region.

SOIL DESCRIPTIONS

LANDOWNER OR OPERATOR ALLISON ABRASIVES
INDUSTRY ROAD
LANCASTER, KY 40444

The soil symbol on the Soil and Capability Map indicates the soil type, the slope of the land and the degree of erosion. The capability class and the soil description for each soil symbol is listed below:

Soil Symbol	Capability Class	Soil Description and Name
75 B	IIE-5	Nicholson silt loam 2 to 6% slopes-upland soil (with a pan at about 2 feet that limits the root zone and water movement. Tilth is good but erod- ibility is high due to silt content.



ADVANCE COPY - SUBJECT TO CHANGE

GARRARD COUNTY, KENTUCKY

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

REFERENCE 21

PREPARED IN COOPERATION WITH
THE COMMONWEALTH OF KENTUCKY
UNIVERSITY OF KENTUCKY
KENTUCKY GEOLOGICAL SURVEY
WALLACE W. HAGAN, DIRECTOR AND
STATE GEOLOGIST

GEOLOGIC
QUADRANGLE MAPS
OF THE
UNITED STATES

GEOLOGIC MAP
OF THE
LANCASTER QUADRANGLE
LINCOLN AND GARRARD COUNTIES
KENTUCKY
By
Gordon W. Weir



PUBLISHED BY THE U.S. GEOLOGICAL SURVEY

WASHINGTON, D. C.

1971

WEIR-LANCASTER, KY. 1:24,000 MAP GC-888

OVERSIZED

DOCUMENT

MAP

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

REFERENCE 22

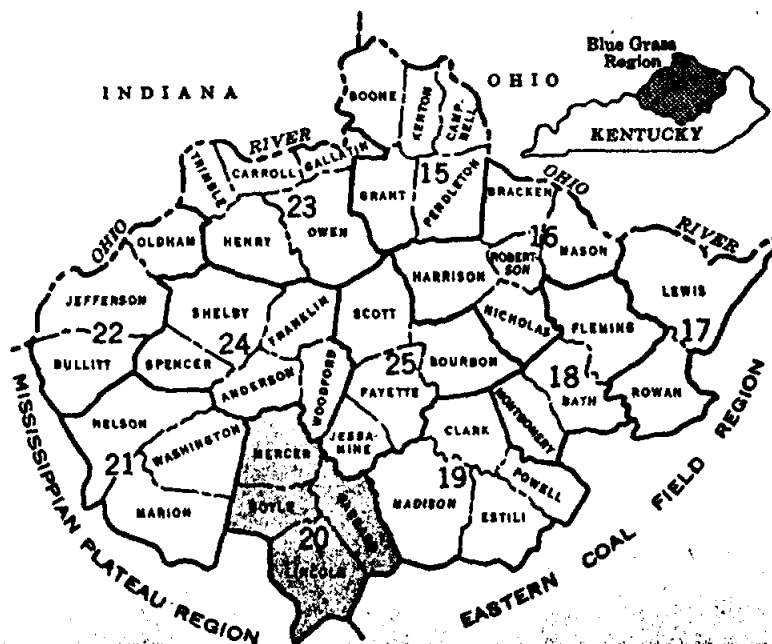
PREPARED IN COOPERATION WITH
THE COMMONWEALTH OF KENTUCKY
DEPARTMENT OF ECONOMIC DEVELOPMENT
AND THE KENTUCKY GEOLOGICAL SURVEY
UNIVERSITY OF KENTUCKY

AVAILABILITY OF GROUND WATER IN BOYLE, GARRARD
LINCOLN, AND MERCER COUNTIES, KENTUCKY

By

W. N. Palmquist, Jr., and F. R. Hall

HYDROLOGIC INVESTIGATIONS
ATLAS HA-20



INDEX MAP OF THE BLUE GRASS REGION, KENTUCKY, SHOWING COUNTY
GROUPS AND AREA OF THIS ATLAS

This is 1 of 11 atlases (HA-15 to HA-25) showing the geology and availability of ground water in the Blue Grass region, Kentucky. U. S. Geological Survey Water-Supply Paper 1533 contains a text description and illustrations providing further information on the occurrence and quality of the ground water in the Blue Grass region.

PUBLISHED BY THE U. S. GEOLOGICAL SURVEY
WASHINGTON, D. C.
1960

OVERSIZED

DOCUMENTS

MAPS

KARST HAZARD ASSESSMENT OF KENTUCKY: SINKHOLE FLOODING AND SINKHOLE COLLAPSE

by

Nicholas Crawford and James Webster

Center for Cave and Karst Studies

Department of Geography and Geology

Western Kentucky University, Bowling Green, Kentucky

Prepared for

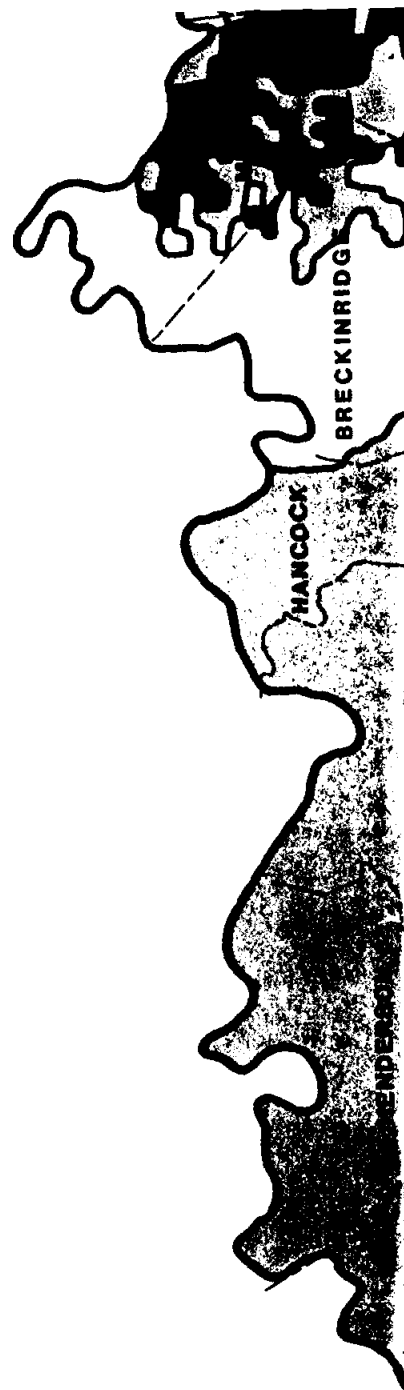
United States Environmental Protection Agency, Region IV

345 Courtland Street, Atlanta, Georgia

Underground Water Source Protection Program Grant No. G004358-83-0

1986

REFERENCE 23



was based upon the
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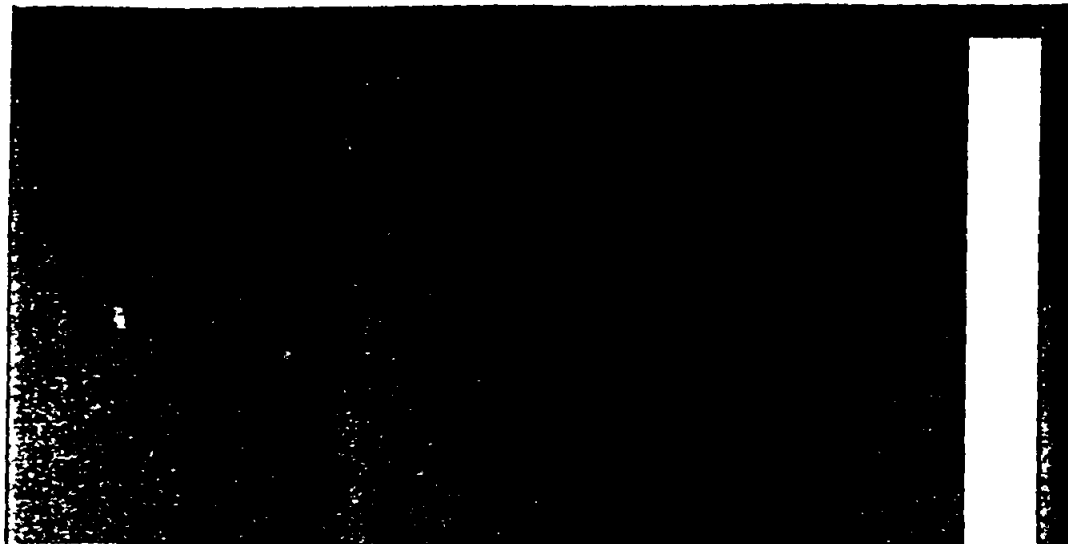
DOCUMENT

MAP

GROUNDWATER



R. Allan Freeze/John A. Cherry



R. Allan Freeze

Department of Geological Sciences
University of British Columbia
Vancouver, British Columbia

John A. Cherry

Department of Earth Sciences
University of Waterloo
Waterloo, Ontario

GROUNDWATER

Prentice-Hall, Inc.
Englewood Cliffs, New Jersey 07632

Table 2.2 Range of Values of Hydraulic Conductivity and Permeability

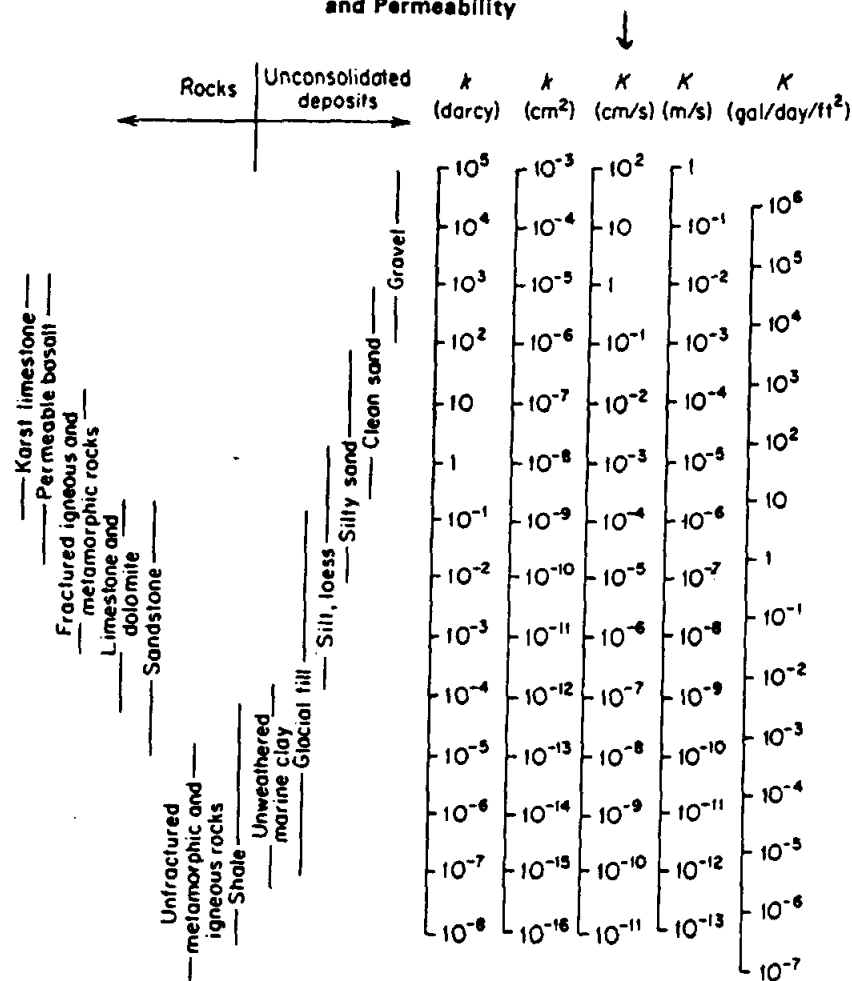


Table 2.3 Conversion Factors for Permeability and Hydraulic Conductivity Units

	Permeability, k^a			Hydraulic conductivity, K		
	cm ²	ft ²	darcy	m/s	ft/s	gal/day/ft ²
cm ²	1	1.08×10^{-3}	1.01×10^8	9.80×10^2	3.22×10^3	1.85×10^9
ft ²	9.29×10^2	1	9.42×10^{10}	9.11×10^5	2.99×10^6	1.71×10^{12}
darcy	9.87×10^{-9}	1.06×10^{-11}	1	9.66×10^{-6}	3.17×10^{-3}	1.82×10^1
m/s	1.02×10^{-3}	1.10×10^{-6}	1.04×10^3	1	3.28	2.12×10^6
ft/s	3.11×10^{-4}	3.35×10^{-7}	3.15×10^4	3.05×10^{-1}	1	5.74×10^5
gal/day/ft ²	5.42×10^{-10}	5.83×10^{-13}	5.49×10^{-2}	4.72×10^{-7}	1.74×10^{-6}	1

^aTo obtain k in ft², multiply k in cm² by 1.08×10^{-3} .

TELEPHONE MEMORANDUM

Site Assessment
Simmons Casket Company

BVWST Project 52011.020
BVWST File E.1
May 22, 1992
3:45 p.m.

Stream Flow Rates for the
Kentucky and Dix Rivers

To: Mike Griffin, Hydrologist
Company: US Geological Survey
Phone No.: (502) 582-5241

Recorded by: Carter Helm

Mr. Griffin checked his USGS records for flow rates (in the Garrard County vicinity) for the Kentucky River and its tributaries located near Lancaster. He provided 1991 average annual flow rates for the following streams:

Kentucky River	7,879 cfs
Dix River	639 cfs
Gilberts Creek	<100 cfs
Turkey Creek	<100 cfs

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

TELEPHONE MEMORANDUM

U. S. EPA Region IV
Simmon's Casket Company
Water distribution

BVWST Project 52011.020
BVWST File
June 4, 1992
13:30

To: Fred Simpson, Water Superintendent
Company: Lancaster Water Works
Phone No.: 606-792-3188

Recorded by: Carter Helm

Mr. Simpson stated that all municipal water is withdrawn from one surface water intake located in the Kentucky River near Sugar Creek. Lancaster Water Works then sells water to Crab Orchard and Garrard County.

Two distribution centers are located in Lancaster, with "master meters" located at city limits at each road leading out of Lancaster. These master meters determine the amount of water the county and Crab Orchard use.

The following connections are associated with each municipality:

1500	Lancaster Water Works
2200	Garrard County Water Association
<u>700</u>	Crab Orchard Water District
4400	Total connections

Population, Family, and Group Quarters Characteristics: 1990

(For definitions of terms and meanings of symbols, see text)

State County Place and (In Selected States) County Subdivision	Family households						Nonfamily households						REFERENCE 27				
	Persons in households	All house- holds	Total	Married- couple family	Female house- holder, no husband present	Total	Householder living				Household	Family	Total	Totalized persons	group quarters		
							Total	65 years	Female	Total							
The State	3 584 120	1 379 782	1 015 908	816 732	196 680	363 784	321 247	142 043	112 832	2.80	3.08	101 178	47 808	53 867			
COUNTY																	
Adair County	14 925	5 800	4 414	3 707	549	1 386	1 301	771	593	2.57	3.01	435	181	254			
Allen County	14 478	5 585	4 270	3 662	480	1 325	1 237	730	559	2.59	3.02	150	150				
Anderson County	14 449	5 438	4 229	3 589	490	1 209	1 085	544	453	2.66	3.06	122	122				
Ballard County	7 795	3 191	2 324	2 004	243	867	804	462	372	2.44	2.91	107	104	3			
Barren County	33 348	13 136	9 901	8 340	1 254	3 235	3 026	1 665	1 344	2.54	2.99	653	619	34			
Bath County	9 564	3 659	2 791	2 296	371	868	808	466	344	2.61	3.05	128	128				
Beall County	30 991	11 512	8 796	6 570	1 799	2 716	2 532	1 329	1 042	2.69	3.16	515	497	18			
Boone County	57 177	20 127	15 722	13 224	1 909	4 405	3 709	1 407	1 150	2.84	3.26	412	372	40			
Bourbon County	19 070	7 250	5 497	4 368	685	1 753	1 540	809	665	2.63	3.06	166	166				
Boyd County	49 653	19 478	14 736	12 121	2 171	5 140	4 772	2 465	2 020	2.50	2.96	1 497	1 436	61			
Boyle County	23 646	9 483	6 974	5 674	1 074	2 509	2 314	1 145	935	2.49	2.97	1 995	1 191	804			
Bracken County	7 684	2 872	2 179	1 793	280	693	628	385	302	2.68	3.12	82	82				
Breathitt County	15 446	5 555	4 385	3 434	741	1 170	1 088	501	379	2.78	3.20	257	117	140			
Breckinridge County	16 196	6 159	4 660	3 922	542	1 490	1 403	734	529	2.63	3.09	116	116				
Bullitt County	47 475	15 965	13 453	11 449	1 473	2 512	2 155	808	607	2.97	3.26	92	90	2			
Butler County	11 029	4 180	3 206	2 700	358	974	896	474	360	2.64	3.07	216	216				
Caldwell County	12 985	5 274	3 843	3 181	539	1 431	1 350	785	643	2.46	2.96	247	247				
Galloway County	27 218	11 607	7 936	6 803	906	3 671	3 143	1 503	1 223	2.34	2.86	3 517	310	3 207			
Campbell County	82 873	31 189	22 237	17 818	3 661	8 932	7 871	3 489	2 798	2.66	3.22	993	614	379			
Carlisle County	3 238	2 108	1 546	1 317	177	560	528	332	287	2.49	2.97						
Carroll County	9 147	3 505	2 537	1 999	420	968	854	416	315	2.61	3.10	145	103	42			
Carter County	23 857	8 679	6 884	5 702	922	1 795	1 668	889	670	2.75	3.15	483	149	334			
Cassidy County	14 001	5 436	4 172	3 483	529	1 284	1 199	649	485	2.59	3.03	120	50	70			
Christian County	59 080	21 636	16 651	13 307	2 783	4 985	4 466	1 983	1 547	2.73	3.17	9 061	1 404	8 457			
Clark County	29 218	10 973	8 496	7 000	1 200	2 477	2 201	1 079	900	2.66	3.07	278	278				
Clay County	21 580	7 367	6 101	4 920	922	1 266	1 191	579	448	2.93	3.28	166	164	2			
Clinton County	9 056	3 591	2 673	2 173	386	918	867	460	355	2.52	2.99	79	79				
Crittenden County	9 036	3 646	2 657	2 264	300	989	933	564	440	2.48	2.98	160	160				
Cumberland County	6 701	2 714	2 013	1 561	345	701	651	380	287	2.47	2.90	83	83				
Daviess County	85 271	33 036	23 990	19 339	3 809	9 056	8 180	3 633	2 674	2.56	3.10	1 918	1 282	636			
Edmonson County	10 157	3 643	3 080	2 643	358	754	714	385	305	2.64	3.00	200	25	175			
Elliot County	6 452	2 324	1 839	1 465	278	485	449	238	182	2.78	3.18	3	3				
Estill County	14 498	5 357	4 185	3 334	690	1 172	1 007	628	514	2.71	3.13	116	113	3			
Fayette County	212 953	80 529	56 412	43 238	10 899	33 117	28 073	6 954	5 749	2.38	2.98	12 413	5 099	7 324			
Fleming County	12 143	4 626	3 510	2 937	417	1 116	1 044	565	444	2.62	3.07	149	149				
Floyd County	43 199	15 664	12 408	10 008	1 903	3 258	3 053	1 445	1 136	2.76	3.18	387	221	166			
Franklin County	42 407	17 385	12 087	9 537	2 085	5 298	4 688	1 784	1 418	2.44	2.97	1 374	993	381			
Fulton County	6 166	3 378	2 316	1 735	490	1 062	994	625	533	2.42	3.00	105	97	8			
Gallatin County	5 344	1 941	1 493	1 240	187	448	402	217	159	2.75	3.18	46	46				
Garrard County	11 471	4 435	3 458	2 901	434	977	886	482	381	2.59	2.97	108	108				
Grant County	15 520	5 585	4 395	3 675	531	1 190	1 087	559	437	2.78	3.18	217	163	54			
Graves County	33 031	13 377	9 851	8 403	1 173	3 526	3 354	1 921	1 567	2.94	3.18	519	466	53			
Grayson County	20 834	7 991	6 114	5 174	708	1 877	1 722	879	633	2.61	3.00	218	214	2			
Green County	10 201	4 089	3 124	2 705	328	865	814	542	420	2.49	2.91	170	170				
Greenup County	36 302	13 414	10 808	9 289	1 221	2 608	2 429	1 154	930	2.71	3.07	440	410	30			
Hancock County	7 795	2 795	2 287	1 960	220	528	492	230	173	2.79	3.15	79	79				
Hardin County	81 720	29 358	23 141	19 424	2 993	6 217	5 467	1 928	1 534	2.78	3.18	7 520	754	6 766			
Hart County	36 323	13 269	10 197	8 003	1 764	3 072	2 907	1 519	1 217	2.74	3.22	249	249				
Harrison County	15 940	6 086	4 574	3 763	632	1 512	1 371	705	610	2.62	3.08	308	289	19			
Hart County	14 831	5 740	4 334	3 591	568	1 406	1 309	731	562	2.58	3.04	56	48	11			
Henderson County	42 467	16 558	12 208	9 896	1 884	4 350	3 999	1 727	1 386	2.56	3.04	577	509	68			
Henry County	12 758	4 896	3 702	3 026	481	1 194	1 068	575	440	2.61	3.03	65	64	1			
Hickman County	5 413	2 188	1 629	1 358	212	520	520	316	240	2.47	2.93	153	153				
Hopkins County	45 422	17 760	13 336	10 920	1 974	4 424	4 086	2 060	1 640	2.56	3.02	704	704				
Jackson County	11 881	4 381	3 457	2 855	464	924	883	482	341	2.71	3.13	74	74				
Jefferson County	653 772	264 138	179 671	133 342	36 319	84 467	72 646	27 724	22 274	2.48	3.04	11 165	7 715	3 450			
Jessamine County	29 345	10 601	8 474	7 084	1 066	2 127	1 759	996	559	2.77	3.12	1 163	195	968			
Johnson County	22 928	8 469	6 629	5 469	923	1 840	1 740	852	666	2.71	3.14	319	319				
Kenton County	140 148	52 890	37 424	29 327	8 403	15 265	13 265	5 305	4 264	2.66	3.23	1 883	1 540	343			
Knox County	17 434	6 086	4 905	3 924	765	1 181	1 109	487	372	2.86	3.28	472	169	303			
Knox County	29 130	10 718	8 330	6 389	1 584	2 388	2 240	1 197	949	2.72	3.15	546	297	249			
Larue County	11 539	4 503	3 424	2 885	405	1 079	1 007	558	439	2.56	2.90	140	137	3			
Laurel County	42 910	15 585	12 567	10 380	1 736	3 018	2 758	1 308	1 036	2.75	3.11	528	411	117			
Lawrence County	13 887	5 037	3 937	3 260	519	1 070	1 010	569	415	2.77	3.21	111	111				
Lee County	7 313	2 780	2 128	1 702	334	832	800	320	248	2.65	3.07	109	109				
Leslie County	13 558	4 711	3 892	3 133	596	819	752	321	242	2.88	3.21	86	84	2			
Leitch County	26 854	9 731	7 701	6 252	1 145	2 030	1 913	988	784	2.76	3.18	146	146				
Letcher County	12 901	4 713	3 690	3 071													



COMMONWEALTH OF KENTUCKY
KENTUCKY STATE NATURE PRESERVES COMMISSION
407 BROADWAY
FRANKFORT, KENTUCKY 40601
(502) 564-2886

May 12, 1992

Ms. Laura Morrison
B & V Waste Science & Technology Corporation
1117 Perimeter Center West, Suite W-212
Atlanta, Georgia 30338

Re: Environmental Review 276

Dear Ms. Morrison:

This letter is in response to your request of April 3, 1992 for environmental review of sixteen (16) separate sites scattered throughout central and western Kentucky. We have reviewed our Natural Heritage Database to determine if any of the endangered, threatened, or special concern species or sensitive natural areas monitored by the Kentucky State Nature Preserves Commission (KSNPC) occur near each of the sixteen project areas. Based on our most current information, we have marked known locations of rare species and sensitive natural areas on the photocopies of United States Geological Survey Topographic Quadrangle maps provided with your request. Enclosed with this letter is a copy of the most current KSNPC list of rare species, which should provide you with supplementary material on those species for which locations have been provided. If the information provided is insufficient for your purposes, or if you have any further questions concerning your request, please feel free to call Mr. Brainard Palmer-Ball, Jr. of my staff.

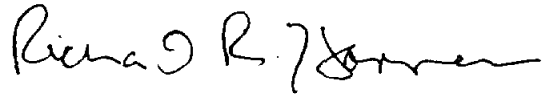
Please note that the quantity and quality of data collected by the Kentucky Natural Heritage Program are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Kentucky have never been thoroughly surveyed, and new species of plants and animals are still being discovered. For these reasons, the Kentucky Natural Heritage Program cannot provide a definitive statement on the presence, absence, or condition of biological elements in any part of Kentucky. Heritage reports summarize the existing information known to the Kentucky Natural Heritage Program at the time of the

L. Morrison, B & V Waste Science & Technology Corp.
May 12, 1992
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request regarding the biological elements or locations in question. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

An invoice for the foregoing environmental review service is enclosed. If you have any questions or I can be of further assistance, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard R. Hannan". The signature is fluid and cursive, with the first name "Richard" being more legible than the last name "Hannan".

Richard R. Hannan
Director

RRH/BPB

Endangered, Threatened, and Special Concern Plant and Animal Species of Kentucky

Kentucky State Nature Preserves Commission
March, 1991

		STATUS		STATUS	
		KSNPC	US	KSNPC	US
PLANTS					
				<i>Aster saxicastellii</i>	T
				Rockcastle Aster	
<i>Acer spicatum</i>	T			<i>Aster sericeus</i>	T
Mountain Maple				Western Silky Aster	
<i>Aconitum uncinatum</i>	T			<i>Aster texanus</i>	E
Blue Monkshood				Texas Aster	
<i>Adiantum capillus-veneris</i>	T			<i>Aureolaria patula</i>	E C1
Southern Maidenhair-fern				Spreading False Foxglove	
<i>Adlumia fungosa</i>	E			<i>Baptisia leucophaea</i>	S
Climbing Fumatory				Cream Wild Indigo	
<i>Agalinis decemloba</i>	E			<i>Baptisia tinctoria</i>	E
Blue Ridge False Foxglove				Yellow Wild Indigo	
<i>Agalinis skinneriana</i>	T C2			<i>Bartonia virginica</i>	E
Pale False Foxglove				Yellow Screwstem	
<i>Agrimonia gryposepala</i>	S			<i>Berchemia scandens</i>	E
Tall Hairy Groovebur				Supple-jack	
<i>Allium burdickii</i>	E			<i>Botrychium matricariifolium</i>	E
Narrow-leaved Wild Leek				Matricary Grape-fern	
<i>Amelanchier stolonifera</i>	E			<i>Botrychium oneidense</i>	E
Running Serviceberry				Blunt-lobed Grape-fern	
<i>Amianthium muscaetoxicum</i>	T			<i>Bouteloua curtipendula</i>	S
Fly Poison				Side-oats Grama	
<i>Angelica triquinata</i>	E			<i>Boykinia aconitifolia</i>	E
Filmy Angelica				Brook Saxifrage	
<i>Apios priceana</i>	E LT			<i>Cabomba caroliniana</i>	S
Price's Potato-bean				Carolina Fanwort	
<i>Arabis glabra</i>	E			<i>Calamagrostis canadensis</i>	E
Tower-mustard				Blue-joint Reedgrass	
<i>Arabis missouriensis</i>	E			<i>Calamagrostis cinnoides</i>	S
Missouri Rock Cress				Nuttall's Small Reedgrass	
<i>Arabis perstellata</i> var. <i>perstellata</i>	E C1			<i>Calamagrostis porteri</i>	E
Braun's Rock Cress				Porter's Reedgrass	
<i>Arenaria cumberlandensis</i>	E LE			<i>Calopogon tuberosus</i>	E
Cumberland Sandwort				Grass Pink	
<i>Arenaria fontinalis</i>	E C1			<i>Caltha palustris</i>	E
Water Stitchwort				Marsh Marigold	
<i>Armoracia lacustris</i>	T C2			<i>Calycanthus floridus</i>	T
Lake Cress				Sweet-shrub	
<i>Aster concolor</i>	E			<i>Calypophus serrulatus</i>	E
Eastern Silvery Aster				Yellow Evening Primrose	
<i>Aster pilosus</i> var. <i>priceae</i>	S			<i>Carex austriaca</i>	E
White Heath Aster				Southern Sedge	

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Carex buxbaumii</i> Brown Bog Sedge	E		<i>Chrysogonum virginianum</i> Green-and-gold	E	
<i>Carex crawei</i> Crawe's Sedge	S		<i>Chrysosplenium americanum</i> American Golden-saxifrage	E	
<i>Carex decomposita</i> Epiphytic Sedge	T		<i>Cicuta bulbifera</i> Bulb-bearing Water-hemlock	E	
<i>Carex gigantea</i> Large Sedge	T		<i>Cimicifuga rubifolia</i> Appalachian Bugbane	T	C2
<i>Carex hystericina</i> Porcupine Sedge	E		<i>Circaea alpina</i> Small Enchanter's Nightshade	T	
<i>Carex jorii</i> Cypress-swamp Sedge	E		<i>Cleistes divaricata</i> Spreading Pogonia	S	
<i>Carex lanuginosa</i> Woolly Sedge	S		<i>Clematis crispa</i> Blue Jasmine Leather-flower	T	
<i>Carex leptalea</i> Bristly-stalk Sedge	S		<i>Clematis glaucophylla</i> White-leaved Leather-flower	S	
<i>Carex leptoneura</i> Finely-nerved Sedge	E		<i>Clematis viorna</i> var. <i>flaccida</i> Flaccid Leather-flower	E	
<i>Carex socialis</i> Social Sedge	S		<i>Comptonia peregrina</i> Sweet Fern	E	
<i>Carex stricta</i> Tussock Sedge	E		<i>Conradina verticillata</i> Cumberland Rosemary	E	PT
<i>Carex tenera</i> Slender Sedge	S		<i>Convallaria montana</i> American Lily-of-the-valley	E	
<i>Carex triangularis</i> Fox Sedge	S		<i>Corallorhiza maculata</i> Spotted Coralroot	E	
<i>Carya aquatica</i> Water Hickory	S		<i>Coreopsis pubescens</i> Star Tickseed	S	
<i>Castanea pumila</i> Allegheny Chinkapin	E		<i>Corydalis sempervirens</i> Pale Corydalis	T	
<i>Castilleja coccinea</i> Scarlet Indian Paintbrush	E		<i>Crotonopsis linearis</i> Narrowleaf Rushfoil	E	
<i>Cayaponia grandifolia</i> Southern Cayaponia	E		<i>Cymophyllus fraseri</i> Fraser's Sedge	E	
<i>Ceanothus herbaceus</i> Prairie Redroot	E		<i>Cyperus retrorsus</i> Retorse Flatsedge	S	
<i>Cheilanthes alabamensis</i> Alabama Lipfern	E		<i>Cypripedium candidum</i> Small White Lady's-slipper	E	
<i>Cheilanthes feei</i> Fee's Lipfern	E		<i>Cypripedium kentuckiense</i> Kentucky Lady's-slipper	S	C2
<i>Chelone obliqua</i> var. <i>obliqua</i> Red Turtlehead	T		<i>Cypripedium parviflorum</i> Small Yellow Lady's-slipper	E	
<i>Chelone obliqua</i> var. <i>speciosa</i> Rose Turtlehead	S		<i>Cypripedium reginae</i> Showy Lady's-slipper	E	

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Decodon verticillatus</i> Hairy Swamp Loosestrife	T		<i>Floerkea proserpinacoides</i> False Mermaid-weed	S	
<i>Delphinium carolinianum</i> Carolina Larkspur	T		<i>Forestiera ligustrina</i> Upland Privet	T	
<i>Deschampsia flexuosa</i> Crinkled Hairgrass	T		<i>Gentiana alba</i> Yellow Gentian	E	
<i>Dichanthelium boreale</i> Northern Witchgrass	S		<i>Gentiana decora</i> Showy Gentian	T	
<i>Didiplis diandra</i> Water-purslane	S		<i>Gentiana puberulenta</i> Prairie Gentian	E	
<i>Dodecatheon frenchii</i> French's Shooting Star	S		<i>Glyceria acutiflora</i> Sharp-scaled Manna Grass	E	
<i>Draba aprica</i> Open-ground Whitlow-grass	E		<i>Glyceria melicaria</i> Slender Manna Grass	S	
<i>Draba cuneifolia</i> Wedge-leaf Whitlow-grass	E		<i>Gratiola pilosa</i> Shaggy Hedge Hyssop	E	
<i>Drosera brevifolia</i> Dwarf Sundew	E		<i>Gratiola viscidula</i> Short's Hedge Hyssop	T	
<i>Drosera intermedia</i> Spoon-leaved Sundew	E		<i>Gymnopogon ambiguus</i> Beardgrass	S	
<i>Dryopteris ludoviciana</i> Southern Shield Wood Fern	E		<i>Gymnopogon brevifolius</i> Beardgrass	E	
<i>Dryopteris spinulosa</i> Spinulose Wood Fern	S		<i>Halesia carolina</i> Carolina Silverbell	T	
<i>Echinodorus rostratus</i> Burhead	T		<i>Hedeoma hispidum</i> Rough Pennyroyal	E	
<i>Echinodorus tenellus</i> Dwarf Burhead	E		<i>Hedyotis michauxii</i> Michaux's Bluets	E	
<i>Elymus svensonii</i> Svenson's Wild Rye	T	C2	<i>Hedyotis uniflora</i> Clustered Bluets	E	
<i>Eriogonum longifolium</i> var. <i>harperi</i> Harper's Umbrella-plant	E	C1	<i>Helianthus eggertii</i> Eggert's Sunflower	E	C2
<i>Eryngium integrifolium</i> Blue-flower Coyote-thistle	E		<i>Helianthus silphioides</i> Silphium Sunflower	T	
<i>Erythronium rostratum</i> Golden Star	E		<i>Heracleum lanatum</i> Cow-parsnip	E	
<i>Eupatorium luciae-brauniae</i> Lucy Braun's White Snakeroot	T	C2	<i>Heteranthera dubia</i> Grassleaf Mud-plantain	T	
<i>Eupatorium maculatum</i> Spotted Joe-pye Weed	E		<i>Heteranthera limosa</i> Blue Mud-plantain	T	
<i>Euphorbia mercurialina</i> Mercury Spurge	E		<i>Heterotheca latifolia</i> Broad-leaf Golden-aster	S	
<i>Fimbristylis puberula</i> Hairy Fimbristylis	E		<i>Hexastylis contracta</i> Southern Heartleaf	E	C2

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Hexastylis heterophylla</i> Variable-leaved Heartleaf	T		<i>Leiophyllum buxifolium</i> Sand-myrtle	E	
<i>Hieracium longipilum</i> Hairy Hawkweed	E		<i>Lesquerella globosa</i> Lesquereux's Bladder-pod	E	C2
<i>Hierochloa odorata</i> Holy Grass	E		<i>Lesquerella lescurii</i> Lescur's Bladder-pod	E	
<i>Hydrocotyle americana</i> American Water-pennywort	E		<i>Leucothoe recurva</i> Fetterbush	E	
<i>Hydrolea ovata</i> Ovate Fiddleleaf	E		<i>Liatris cylindracea</i> Slender Blazing-star	S	
<i>Hydrophyllum virginianum</i> Virginia Waterleaf	S		<i>Lilium philadelphicum</i> Wood Lily	T	
<i>Hypericum adpressum</i> Creeping St. John's-wort	E		<i>Lilium superbum</i> Turk's Cap Lily	E	
<i>Hypericum crux-andreae</i> St. Peter's-wort	E		<i>Limnobium spongia</i> American Frog's-bit	T	
<i>Hypericum dolabriforme</i> Glade St. John's-wort	S	C2	<i>Linum sulcatum</i> Grooved Yellow Flax	S	
<i>Iris fulva</i> Copper Iris	E		<i>Liparis loeselii</i> Loesel's Twayblade	S	
<i>Isoetes butleri</i> Butler's Quillwort	E		<i>Listera australis</i> Southern Twayblade	E	
<i>Isoetes melanopoda</i> Blackfoot Quillwort	E		<i>Listera smallii</i> Kidney-leaf Twayblade	E	
<i>Juglans cinerea</i> White Walnut	S	C2	<i>Lobelia appendiculata</i> var. <i>gattingeri</i> Gattinger's Lobelia	E	C2
<i>Juncus articulatus</i> Jointed Rush	S		<i>Lobelia nuttallii</i> Nuttall's Lobelia	E	
<i>Juncus elliotii</i> Bog Rush	E		<i>Lonicera prolifera</i> Grape Honeysuckle	E	
<i>Juncus longistylis</i> Long-styled Rush	E		<i>Ludwigia hirtella</i> Hairy Ludwigia	E	
<i>Juniperus communis</i> Ground Juniper	E		<i>Lycopodium appressum</i> Southern Bog Clubmoss	E	
<i>Koeleria cristata</i> Junegrass	E		<i>Lysimachia fraseri</i> Fraser's Loosestrife	E	C2
<i>Lathyrus palustris</i> Vetchling Peavine	S		<i>Lysimachia radicans</i> Trailing Loosestrife	E	
<i>Lathyrus venosus</i> Smooth Veiny Peavine	T		<i>Lysimachia terrestris</i> Swamp Candles	E	
<i>Leavenworthia exigua</i> var. <i>laciniata</i> Glade Cress	T	C1	<i>Maianthemum canadense</i> Wild Lily-of-the-valley	T	
<i>Leavenworthia torulosa</i> Necklace Glade Cress	E		<i>Malus angustifolia</i> Southern Crabapple	S	

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Malus ioensis</i>	S		<i>Onosmodium hispidissimum</i>	E	
Iowa Crabapple			Hairy False Gromwell		
<i>Malvastrum hispidum</i>	T	C2	<i>Onosmodium molle</i> ssp. <i>molle</i>	E	
Hispid Falsemallow			Soft False Gromwell		
<i>Marshallia grandiflora</i>	E	C2	<i>Onosmodium molle</i> ssp. <i>occidentale</i>	E	
Barbara's Buttons			Western False Gromwell		
<i>Matelea carolinensis</i>	E		<i>Orontium aquaticum</i>	T	
Carolina Anglepod			Golden Club		
<i>Mecardonia acuminata</i>	T		<i>Oryzopsis racemosa</i>	T	
Purple Mecardonia			Black-fruit Mountain-ricegrass		
<i>Melampyrum lineare</i>	E		<i>Oxalis priceae</i>	E	
American Cow-wheat			Price's Yellow Wood Sorrel		
<i>Melanthium virginicum</i>	E		<i>Pachistima canbyi</i>	T	C2
Virginia Bunchflower			Canby's Mountain-lover		
<i>Minuartia glabra</i>	E		<i>Parnassia asarifolia</i>	E	
Appalachian Sandwort			Kidneyleaf Grass-of-parnassus		
<i>Mirabilis albida</i>	E		<i>Parnassia grandifolia</i>	E	
Pale Umbrella-wort			Large-flowered Grass-of-parnassus		
<i>Monarda punctata</i>	E		<i>Paronychia argyrocoma</i>	E	
Spotted Bee-balm			Silverling		
<i>Monotropsis odorata</i>	T		<i>Paspalum boscianum</i>	S	
Sweet Pinesap			Bull Paspalum		
<i>Muhlenbergia bushii</i>	S		<i>Pedicularis lanceolata</i>	E	
Bush's Muhly			Swamp Lousewort		
<i>Muhlenbergia cuspidata</i>	E		<i>Perideridia americana</i>	T	
Plains Muhly			Eastern Eulophus		
<i>Muhlenbergia expansa</i>	E		<i>Phacelia ranunculacea</i>	S	
Cut-over Muhly			Blue Scorpion-weed		
<i>Muhlenbergia glabriflora</i>	S		<i>Philadelphus inodorus</i>	E	
Hair Grass			Mock Orange		
<i>Myriophyllum heterophyllum</i>	S		<i>Philadelphus pubescens</i>	E	
Broadleaf Water-milfoil			Hoary Mock Orange		
<i>Myriophyllum pinnatum</i>	S		<i>Phlox bifida</i> ssp. <i>stellaria</i>	T	C2
Cutleaf Water-milfoil			Starry Cleft Phlox		
<i>Najas gracillima</i>	S		<i>Physostegia intermedia</i>	E	
Thread-like Naiad			Slender Dragon-head		
<i>Nemophila aphylla</i>	S		<i>Plantago cordata</i>	E	
Small-flowered Baby-blue-eyes			Heart-leaved Plantain		
<i>Oenothera linifolia</i>	T		<i>Platanthera cristata</i>	E	
Thread-leaf Sundrops			Yellow-crested Orchid		
<i>Oenothera perennis</i>	E		<i>Platanthera integrilabia</i>	E	C2
Small Sundrops			White Fringeless Orchid		
<i>Oenothera triloba</i>	T		<i>Platanthera psycodes</i>	E	
Stemless Evening-primrose			Small Purple-fringed Orchid		

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Poa languida</i>	E		<i>Rhododendron canescens</i>	E	
Drooping Bluegrass			Hoary Azalea		
<i>Podostemum ceratophyllum</i>	T		<i>Rhynchosia tomentosa</i>	E	
Threadfoot			Hairy Snoutbean		
<i>Pogonia ophioglossoides</i>	E		<i>Rhynchospora globularis</i>	T	
Rose Pogonia			Globe Beaked-rush		
<i>Polygala cruciata</i>	E		<i>Rhynchospora macrostachya</i>	E	
Crossleaf Milkwort			Tall Beaked-rush		
<i>Polygala nuttallii</i>	E		<i>Rubus whartoniae</i>	T	C2
Nuttall's Milkwort			Wharton's Dewberry		
<i>Polygala polygama</i>	E		<i>Rudbeckia subtomentosa</i>	T	
Racemed Milkwort			Sweet Coneflower		
<i>Polymnia laevigata</i>	E		<i>Sabaria campanulata</i>	E	
Tennessee Leafcup			Slender Marsh Pink		
<i>Pontederia cordata</i>	E		<i>Sagittaria brevirostra</i>	S	
Pickerel Weed			Short-beaked Arrowhead		
<i>Potamogeton praelongus</i>	E		<i>Sagittaria graminea</i>	T	
White-stem Pondweed			Grassleaf Arrowhead		
<i>Potamogeton pulcher</i>	E		<i>Salvia urticifolia</i>	E	
Spotted Pondweed			Nettle-leaf Sage		
<i>Prenanthes alba</i>	E		<i>Sambucus racemosa</i>	T	
White Rattlesnake-root			European Red Elder		
<i>Prenanthes aspera</i>	E		<i>Sanguisorba canadensis</i>	E	
Rough Rattlesnake-root			Canada Burnet		
<i>Prenanthes barbata</i>	E	C2	<i>Saxifraga michauxii</i>	E	
Barbed Rattlesnake-root			Michaux's Saxifrage		
<i>Prenanthes crepidinea</i>	S		<i>Saxifraga micranthidifolia</i>	E	
Nodding Rattlesnake-root			Lettuce-leaf Saxifrage		
<i>Psoralea stipulata</i>	E	C1*	<i>Schisandra coccinea</i>	E	
Stipuled Scurf-pea			Schisandra		
<i>Psoralea tenuiflora</i>	E		<i>Schizachne purpurascens</i>	T	
Few-flowered Scurf-pea			Purple Oat		
<i>Prilimnium capillaceum</i>	T		<i>Schwalbea americana</i>	E	C1
Mock Bishop-weed			Chaffseed		
<i>Prilimnium nuttallii</i>	E		<i>Scirpus expansus</i>	S	
Nuttall's Mock Bishop-weed			Woodland Beakrush		
<i>Pycnanthemum albescens</i>	E		<i>Scirpus fluvialis</i>	T	
White-leaved Mountain Mint			River Bulrush		
<i>Pyrola americana</i>	E		<i>Scirpus hallii</i>	E	C2
American Wintergreen			Hall's Bulrush		
<i>Ranunculus allegheniensis</i>	S		<i>Scirpus heterochaetus</i>	E	
Allegheny Mountain Crowfoot			Slender Bulrush		
<i>Ranunculus ambigens</i>	S		<i>Scirpus microcarpus</i>	E	
Water-plantain			Small-fruit Bulrush		

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Scleria ciliata</i>	E		<i>Spiraea virginiana</i>	E	LT
Fringed Nutrush			Virginia Spiraea		
<i>Scutellaria saxatilis</i>	T	C2	<i>Spiranthes lucida</i>	T	
Rock Skullcap			Shining Ladies'-Tresses		
<i>Sedum telephioides</i>	T		<i>Spiranthes magnicamporum</i>	E	
Allegheny Stonecrop			Great Plains Ladies'-Tresses		
<i>Sida hermaphrodita</i>	T		<i>Spiranthes odorata</i>	E	
Virginia Mallow			Sweetscent Ladies'-Tresses		
<i>Silene ovata</i>	T	C2	<i>Sporobolus clandestinus</i>	E	
Ovate Catchfly			Rough Dropseed		
<i>Silene regia</i>	E	C2	<i>Sporobolus heterolepis</i>	E	
Royal Catchfly			Northern Dropseed		
<i>Silphium laciniatum</i>	T		<i>Stachys eplingii</i>	S	
Compass Plant			Epling's Hedgenettle		
<i>Silphium terebinthinaceum</i>			<i>Stellaria longifolia</i>	S	
var. <i>lucy-brauniae</i>	S		Longleaf Stitchwort		
Lucy Braun's Prairie Dock			<i>Streptopus roseus</i>	E	
<i>Smilacina stellata</i>	E		Rosy Twisted-stalk		
Starflower False Solomon's-seal			<i>Syrax grandifolius</i>	T	
<i>Solidago albopilosa</i>	T	LT	Bigleaf Snowbell		
White-haired Goldenrod			<i>Sullivantia sullivantii</i>	E	
<i>Solidago buckleyi</i>	S		Sullivantia		
Buckley's Goldenrod			<i>Symphoricarpos albus</i>	E	
<i>Solidago curtisii</i>	S		Snowberry		
Curtis' Goldenrod			<i>Talinum calcaricum</i>	E	C2
<i>Solidago puberula</i>	T		Limestone Fameflower		
Downy Goldenrod			<i>Talinum teretifolium</i>	T	
<i>Solidago radula</i>	E		Roundleaf Fameflower		
Western Rough Goldenrod			<i>Taxus canadensis</i>	S	
<i>Solidago roanensis</i>	T		Canadian Yew		
Roan Mountain Goldenrod			<i>Tephrosia spicata</i>	E	
<i>Solidago shortii</i>	E	LE	Spiked Hoary-pea		
Short's Goldenrod			<i>Thalictrum coriaceum</i>	E	
<i>Solidago spathulata</i>	S		Leatherleaf Meadow-rue		
Sticky Goldenrod			<i>Thalictrum mirabile</i>	S	
<i>Solidago squarrosa</i>	E		Little Mountain Meadow-rue		
Squarrose Goldenrod			<i>Thaspium pinnatifidum</i>	S	
<i>Sparganium eurycarpum</i>	E		Cutleaf Meadow-parsnip		
Large Bur-reed			<i>Thermopsis mollis</i>	E	
<i>Sphenopholis pensylvanica</i>	E		Soft-haired Thermopsis		
Swamp Wedgescale			<i>Thuja occidentalis</i>	T	
<i>Spiraea alba</i>	E		Northern White Cedar		
Narrow-leaved Meadow-sweet			<i>Torreyochloa pallida</i>	E	
			Pale Manna Grass		

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Tragia urticifolia</i>	E		<i>Woodsia scopulina</i>	E	
Nettle-leaf Noseburn			Rocky Mountain Woodsia		
<i>Trepocarpus aethusae</i>	E		<i>Xerophyllum asphodeloides</i>	E	
Trepocarpus			Eastern Turkeybeard		
<i>Trichomanes boschianum</i>	S		<i>Zizania aquatica</i>	E	
Filmy Fern			Indian Wild Rice		
<i>Trichostema setaceum</i>	E		<i>Zizaniopsis miliacea</i>	E	
Narrow-leaved Blue Curls			Southern Wild Rice		
<i>Trientalis borealis</i>	E		ANIMALS		
Northern Starflower			Gastropods		
<i>Trifolium reflexum</i>	E		<i>Glyphyalinia rhoadsi</i>	T	
Buffalo Clover			Sculpted glyph		
<i>Trifolium stoloniferum</i>	E	LE	<i>Mesomphix rugeli</i>	T	
Running Buffalo Clover			Wrinkled button		
<i>Trillium nivale</i>	E		<i>Pilsbryna</i> sp.	E	
Snow Trillium			A snail (undescribed)		
<i>Trillium pusillum</i> var. <i>ozarkanum</i>	E	C2	<i>Triodopsis denifera</i>	T	
Ozark Least Trillium			Big-tooth whitelip		
<i>Trillium pusillum</i> var. <i>pusillum</i>	E	C2	<i>Vertigo bollesiana</i>	T	
Least Trillium			Delicate vertigo		
<i>Trillium undulatum</i>	T		<i>Vertigo clappi</i>	E	
Painted Trillium			Cupped vertigo		
<i>Ulmus serotina</i>	S		<i>Vitizonites latissimus</i>	E	
September Elm			Glassy grapeskin		
<i>Utricularia vulgaris</i>	E		Unionids (Mussels)		
Greater Bladderwort			<i>Alasmidonta atropurpurea</i>	E	C2
<i>Vallisneria americana</i>	S		Cumberland elktoe		
Eel-grass			<i>Alasmidonta marginata</i>	T	
<i>Veratrum parviflorum</i>	T		Elktoe		
Small-flowered False Hellebore			<i>Cumberlandia monodonta</i>	E	C2
<i>Veratrum woodii</i>	T		Spectaclecase		
False Hellebore			<i>Cyprogenia stegaria</i>	E	LE
<i>Vernonia noveboracensis</i>	E		Fanshell		
New York Ironweed			<i>Epioblasma brevidens</i>	E	C2
<i>Viburnum lentago</i>	E		Cumberlandian combshell		
Nannyberry			<i>Epioblasma capsaeformis</i>	E	C2
<i>Viburnum nudum</i>	E		Oyster mussel		
Possum Haw Viburnum			<i>Epioblasma florentina walkeri</i>	E	LE
<i>Viola egglestonii</i>	S		Tan riffleshell		
Eggleston's Violet					
<i>Viola walteri</i>	E				
Walter's Violet					
<i>Vitis rupestris</i>	T				
Sand Grape					

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Epioblasma obliquata obliquata</i>	E	LE	<i>Quadrula cylindrica cylindrica</i>	T	
Catspaw			Rabbitsfoot		
<i>Epioblasma torulosa rangiana</i>	E	C2	<i>Quadrula fragosa</i>	E	PE
Northern riffleshell			Winged mapleleaf		
<i>Epioblasma triquetra</i>	S		<i>Simpsonaias ambigua</i>	T	C2
Snuffbox			Salamander mussel		
<i>Fusconaia subrotunda subrotunda</i>	T		<i>Toxolasma lividus</i>	E	C2
Long-solid			Purple lilliput		
<i>Hemistena lata</i>	E	LE	<i>Toxolasma texasensis</i>	S	
Cracking pearlymussel			Texas lilliput		
<i>Lampsilis abrupta</i>	E	LE	<i>Villosa fabalis</i>	E	C2
Pink mucket			Rayed bean		
<i>Lampsilis ovata</i>	E		<i>Villosa lienosa</i>	S	
Pocketbook			Little spectaclecase		
<i>Lasmigona compressa</i>	E		<i>Villosa ormanni</i>	E	C2
Creek heelsplitter			Kentucky creekshell		
<i>Lasmigona subviridis</i>	E		<i>Villosa trabalis</i>	E	LE
Green floater			Cumberland bean		
<i>Leptodea leptodon</i>	E	C2	<i>Villosa vanuxemensis</i>	T	
Scaleshell			Mountain creekshell		
<i>Lexingtonia dolabelloides</i>	E	C2			
Slabside pearlymussel			Crustaceans		
<i>Obovaria retusa</i>	E	LE	<i>Barbicambarus cornutus</i>	S	
Ring pink			Bottlebrush crayfish		
<i>Pegias fabula</i>	E	LE	<i>Caecidotea barri</i>	E	C2
Little-wing pearlymussel			Clifton cave isopod		
<i>Plethobasus cooperianus</i>	E	LE	<i>Cambarellus puer</i>	E	
Orange-foot pimpleback			A dwarf crayfish		
<i>Plethobasus cyphus</i>	S		<i>Cambarellus shufeldtii</i>	S	
Sheepnose			Cajun dwarf crayfish		
<i>Pleurobema clava</i>	E	C2	<i>Cambarus ornatus</i>	S	
Clubshell			A crayfish		
<i>Pleurobema oviforme</i>	E	C2	<i>Cambarus parvoculus</i>	E	
Tennessee clubshell			A crayfish		
<i>Pleurobema plenum</i>	E	LE	<i>Gammarus bousfieldi</i>	E	C2
Rough pigtoe			Bousfield's amphipod		
<i>Pleurobema pyramidatum</i>	E	3B	<i>Macrobrachium ohione</i>	E	
Pyramid pigtoe			Ohio shrimp		
<i>Potamilus capax</i>	E	LE	<i>Orconectes australis</i>	T	
Fat pocketbook			A crayfish		
<i>Potamilus purpuranus</i>	E		<i>Orconectes bisectus</i>	T	
Bleufer			Crittenden crayfish		
<i>Ptychobranhus subtennum</i>	T		<i>Orconectes inermis</i>	T	
Fluted kidneyshell			A crayfish		

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Orconectes jeffersoni</i> Louisville crayfish	E	C2	<i>Etheostoma cinereum</i> Ashy darter	T	
<i>Orconectes lancifer</i> A crayfish	E		<i>Etheostoma fusiforme</i> Swamp darter	E	
<i>Orconectes palmeri</i> A crayfish	E		<i>Etheostoma maculatum</i> Spotted darter	T	
<i>Orconectes pellucidus</i> Eyeless crayfish	S		<i>Etheostoma microlepidum</i> Smallscale darter	E	
<i>Palaemonias ganteri</i> Kentucky cave shrimp	E	LE	<i>Etheostoma microperca</i> Least darter	E	
<i>Procambarus viaevidis</i> A crayfish	T		<i>Etheostoma nigrum susanae</i> Cumberland johnny darter	E	C2
<i>Stygobromus vitreus</i> An amphipod	S		<i>Etheostoma parvipinne</i> Goldstripe darter	S	
Insects			<i>Etheostoma proeliare</i> Cypress darter	T	
<i>Madeophylax</i> sp. A caddisfly (undescribed)	T		<i>Etheostoma sagitta spilatum</i> Arrow darter	S	
Fishes			<i>Etheostoma</i> sp. Firebelly darter (undescribed)	S	
<i>Acipenser fulvescens</i> Lake sturgeon	E	C2	<i>Etheostoma swaini</i> Gulf darter	S	
<i>Alosa alabamae</i> Alabama shad	E		<i>Etheostoma tippecanoe</i> Tippecanoe darter	S	
<i>Amblyopsis spelaea</i> Northern cavefish	S	C2	<i>Etheostoma zonale lynceum</i> Banded darter	S	
<i>Ammocrypta asprella</i> Crystal darter	E	C2	<i>Fundulus chrysotus</i> Golden topminnow	E	
<i>Ammocrypta clara</i> Western sand darter	E		<i>Fundulus notii</i> Starhead topminnow	E	
<i>Ammocrypta pellucida</i> Eastern sand darter	S	C2	<i>Hemitemia flammea</i> Flame chub	E	
<i>Ammocrypta vivax</i> Scaly sand darter	E		<i>Hybognathus hayi</i> Cypress minnow	E	
<i>Clinostomus elongatus</i> Redside dace	S		<i>Hybognathus placitus</i> Plains minnow	S	
<i>Clinostomus funduloides</i> Rosyside dace	S		<i>Hybopsis gelida</i> Sturgeon chub	S	C2
<i>Erimyzon sucetta</i> Lake chubsucker	T		<i>Hybopsis gracilis</i> Flathead chub	S	
<i>Esox niger</i> Chain pickerel	S		<i>Hybopsis insignis</i> Blotched chub	E	
			<i>Hybopsis meeki</i> Sicklefin chub	S	C2

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Hybopsis x-punctata</i>	E		<i>Noturus exilis</i>	E	
Gravel chub			Slender madtom		
<i>Ichthyomyzon castaneus</i>	S		<i>Noturus hildebrandi</i>	S	
Chestnut lamprey			Least madtom		
<i>Ichthyomyzon fossor</i>	T		<i>Noturus phaeus</i>	S	
Northern brook lamprey			Brown madtom		
<i>Ichthyomyzon gagei</i>	E		<i>Noturus stigmosus</i>	S	
Southern brook lamprey			Northern madtom		
<i>Ichthyomyzon greeleyi</i>	T		<i>Percina burtoni</i>	E	
Mountain brook lamprey			Blotchside darter		
<i>Ictiobus niger</i>	S		<i>Percina evides</i>	S	
Black buffalo			Gilt darter		
<i>Lampetra appendix</i>	T		<i>Percina macrocephala</i>	T	C2
American brook lamprey			Longhead darter		
<i>Lepisosteus spatula</i>	E		<i>Percina squamata</i>	E	C2
Alligator gar			Olive darter		
<i>Lepomis marginatus</i>	E		<i>Percopsis omiscomaycus</i>	S	
Dollar sunfish			Trout-perch		
<i>Lepomis punctatus</i>	T		<i>Phenacobius uranops</i>	S	
Spotted sunfish			Stargazing minnow		
<i>Lota lota</i>	S		<i>Phoxinus cumberlandensis</i>	E	LT
Burbot			Blackside dace		
<i>Menidia beryllina</i>	T		<i>Rhinichthys cataractae</i>	E	
Inland silverside			Longnose dace		
<i>Moxostoma atripinne</i>	S		<i>Scaphirhynchus albus</i>	E	LE
Blackfin sucker			Pallid sturgeon		
<i>Moxostoma poecilurum</i>	S		<i>Typhlichthys subterraneus</i>	S	
Blacktail redhorse			Southern cavefish		
<i>Nocomis biguttatus</i>	S		<i>Umbra limi</i>	T	
Hornyhead chub			Central Mudminnow		
<i>Notropis amnis</i>	E				
Pallid shiner			Amphibians		
<i>Notropis camurus</i>	S		<i>Amphiuma tridactylum</i>	E	
Bluntnose shiner			Three-toed Amphiuma		
<i>Notropis hudsonius</i>	S		<i>Eurycea guttolineata</i>	T	
Spottail shiner			Three-lined Salamander		
<i>Notropis maculatus</i>	T		<i>Hyla avivoca</i>	T	
Taillight shiner			Bird-voiced Treefrog		
<i>Notropis venustus</i>	S		<i>Hyla cinerea</i>	S	
Blacktail shiner			Green Treefrog		
<i>Notropis</i> sp.	E	C2	<i>Hyla gratiosa</i>	S	
Palezone shiner (undescribed)			Barking Treefrog		
<i>Notropis</i> sp.	E		<i>Hyla versicolor</i>	S	
Sawfin shiner (undescribed)			Gray Treefrog		

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Plethodon cinereus</i> Redback Salamander	S		<i>Thamnophis sauritus sauritus</i> Eastern Ribbon Snake	S	
<i>Plethodon wehrlei</i> Wehrle's Salamander	E		Birds		
<i>Rana areolata circulosa</i> Northern Crawfish Frog	S		<i>Accipiter striatus</i> Sharp-shinned Hawk	S	
<i>Rana pipiens</i> Northern Leopard Frog	S		<i>Actitis macularia</i> Spotted Sandpiper	E	
Reptiles			<i>Aimophila aestivalis</i> Bachman's Sparrow	E	C2
<i>Apalone mutica mutica</i> Midland Smooth Softshell	S		<i>Ammodramus henslowii</i> Henslow's Sparrow	S	
<i>Chrysemys picta dorsalis</i> Southern Painted Turtle	S		<i>Anas discors</i> Blue-winged Teal	E	
<i>Clonophis kirtlandii</i> Kirtland's Snake	E	C2	<i>Ardea herodias</i> Great Blue Heron	S	
<i>Elaphe guttata guttata</i> Corn Snake	S		<i>Asio flammeus</i> Short-eared Owl	E	
<i>Eumeces anthracinus anthracinus</i> Northern Coal Skink	T		<i>Bartramia longicauda</i> Upland Sandpiper	E	
<i>Eumeces anthracinus pluvialis</i> Southern Coal Skink	E		<i>Botaurus lentiginosus</i> American Bittern	E	
<i>Eumeces inexpectatus</i> Southeastern Five-lined Skink	S		<i>Bubulcus ibis</i> Cattle Egret	S	
<i>Farancia abacura reinwardtii</i> Western Mud Snake	S		<i>Casmerodius albus</i> Great Egret	E	
<i>Lampropeltis mangulum elapsoides</i> Scarlet Kingsnake	S		<i>Certhia americana</i> Brown Creeper	E	
<i>Macroclermys temminckii</i> Alligator Snapping Turtle	T	C2	<i>Chondestes grammacus</i> Lark Sparrow	T	
<i>Nerodia cyclopion</i> Mississippi Green Water Snake	E		<i>Circus cyaneus</i> Northern Harrier	T	
<i>Nerodia erythrogaster neglecta</i> Copperbelly Water Snake	S	C2	<i>Cistothorus platensis</i> Sedge Wren	S	
<i>Nerodia fasciata confluenta</i> Broad-banded Water Snake	E		<i>Corvus corax</i> Common Raven	E	
<i>Ophisaurus attenuatus longicaudus</i> Eastern Slender Glass Lizard	T		<i>Corvus ossifragus</i> Fish Crow	S	
<i>Pituophis melanoleucus melanoleucus</i> Northern Pine Snake	T		<i>Dendroica fusca</i> Blackburnian Warbler	T	
<i>Sistrurus miliarius streckeri</i> Western Pigmy Rattlesnake	T		<i>Dolichonyx oryzivorus</i> Bobolink	S	
<i>Thamnophis proximus proximus</i> Western Ribbon Snake	T		<i>Egretta caerulea</i> Little Blue Heron	E	

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

	STATUS			STATUS	
	KSNPC	US		KSNPC	US
<i>Empidonax minimus</i> Least Flycatcher	T		<i>Tyto alba</i> Barn Owl	S	
<i>Fulica americana</i> American Coot	E		<i>Vermivora chrysoptera</i> Golden-winged Warbler	T	
<i>Gallinula chloropus</i> Common Moorhen	T		<i>Vireo bellii</i> Bell's Vireo	S	
<i>Haliaeetus leucocephalus</i> Bald Eagle	E	LE	<i>Wilsonia canadensis</i> Canada Warbler	S	
<i>Ictinia mississippiensis</i> Mississippi Kite	S		Mammals		
<i>Ixobrychus exilis</i> Least Bittern	T		<i>Clethrionomys gapperi maurus</i> Kentucky Red-backed Vole	S	C2
<i>Junco hyemalis</i> Dark-eyed Junco	S		<i>Mustela nivalis</i> Least Weasel	S	
<i>Lophodytes cucullatus</i> Hooded Merganser	E		<i>Myotis austroriparius</i> Southeastern Myotis	E	C2
<i>Nyctanassa violacea</i> Yellow-crowned Night-Heron	T		<i>Myotis grisescens</i> Gray Myotis	E	LE
<i>Nycticorax nycticorax</i> Black-crowned Night-Heron	E		<i>Myotis leibii</i> Eastern Small-footed Myotis	E	C2
<i>Pandion haliaetus</i> Osprey	T		<i>Myotis septentrionalis</i> Northern Long-eared Myotis	S	
<i>Passerculus sandwichensis</i> Savannah Sparrow	S		<i>Myotis sodalis</i> Indiana Myotis	E	LE
<i>Phalacrocorax auritus</i> Double-crested Cormorant	E		<i>Nycticeius humeralis</i> Evening Bat	T	
<i>Pheucicus ludovicianus</i> Rose-breasted Grosbeak	S		<i>Peromyscus gossypinus</i> Cotton Mouse	T	
<i>Picoides borealis</i> Red-cockaded Woodpecker	E	LE	<i>Pleconus rafinesquii</i> Rafinesque's Big-eared Bat	T	C2
<i>Podilymbus podiceps</i> Pied-billed Grebe	E		<i>Pleconus townsendii virginianus</i> Virginia Big-eared Bat	E	LE
<i>Poocetes gramineus</i> Vesper Sparrow	E		<i>Sorex cinereus</i> Masked Shrew	S	
<i>Rallus elegans</i> King Rail	E		<i>Sorex dispar</i> Long-tailed Shrew	E	C2
<i>Riparia riparia</i> Bank Swallow	S		<i>Spilogale putorius</i> Eastern Spotted Skunk	S	
<i>Sterna antillarum athalassos</i> Interior Least Tern	E	LE	<i>Sylvilagus transitionalis</i> New England Cottontail	E	C2
<i>Thryomanes bewickii</i> Bewick's Wren	S		<i>Ursus americanus</i> Black Bear	S	

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

Key to Status Categories

(KSNPC) Kentucky State Nature Preserves Commission

E: Endangered. A species in danger of extirpation and/or extinction throughout all or a significant part of its range in Kentucky.

T: Threatened. A species likely to become endangered within the foreseeable future throughout all or a significant part of its range in Kentucky.

S: Special Concern. A species that should be monitored because (a) it exists in a limited geographic area, (b) it may become threatened or endangered due to modification or destruction of habitat, (c) certain characteristics or requirements make it especially vulnerable to specific pressures, (d) experienced researchers have identified other factors that may jeopardize it, or (e) it is thought to be rare or declining but insufficient information exists for assignment to the threatened or endangered status categories.

(US) Endangered Species Act of 1973

For status category definitions see United States Fish and Wildlife Service (1988. The Endangered Species Act of 1973 as amended through the 100th Congress. United States Government Printing Office, Washington, District of Columbia; 1990. Endangered and threatened wildlife and plants; review of plant taxa for listing as endangered or threatened species; notice of review. Federal Register 55:6184-6229).

US statuses were taken from United States Fish and Wildlife Service (1989. Endangered and threatened wildlife and plants; animal notice of review. Federal Register 54:554-579; 1990. Endangered and threatened wildlife and plants. United States Government Printing Office, Washington, District of Columbia; 1990. Endangered and threatened wildlife and plants; review of plant taxa for listing as endangered or threatened species; notice of review. Federal Register 55:6184-6229) and subsequent updates.

LE: Listed Endangered

PE: Proposed Endangered

LT: Listed Threatened

PT: Proposed Threatened

C1: Status Review (* indicates likelihood of extinction)

C2: Status Review

3B: Not a species under the Endangered Species Act

Kentucky Endangered, Threatened, and Special Concern Species (March, 1991) (continued)

Some United States Fish and Wildlife Service candidates for listing (C2) are not monitored by the Kentucky State Nature Preserves Commission because (1) they are not considered rare in Kentucky (Table 1) or (2) additional information is required to determine their status in the state (Table 2). Statuses were taken from United States Fish and Wildlife Service (1989. Endangered and threatened wildlife and plants; animal notice of review. Federal Register 54:554-579; 1990. Endangered and threatened wildlife and plants; review of plant taxa for listing as endangered or threatened species; notice of review. Federal Register 55:6184-6229).

Table 1: Federal candidate species not considered rare in Kentucky.

PLANTS	Amphibians
<i>Carex purpurifera</i> Purple Sedge	<i>Cryptobranchus alleganiensis alleganiensis</i> Eastern Hellbender
ANIMALS	Birds
Crustaceans	<i>Lanius ludovicianus migrans</i> Migrant Loggerhead Shrike
<i>Cambarus batchi</i> Bluegrass crayfish	Mammals
Fishes	<i>Neotoma floridana magister</i> Eastern Woodrat
<i>Cyclepnus elongatus</i> Blue sucker	<i>Sorex hoyi winnemana</i> Pygmy Shrew

Table 2: Federal candidate species for which more information is needed to determine their status in Kentucky.

ANIMALS	
Gastropods	<i>Lordithon niger</i> Black lordithon rove beetle
<i>Glyphyalinia raderi</i> Maryland glyph	<i>Lyttosis permagnaria</i> A geometrid moth
<i>Leptoxis praerosa</i> Onyx rocksnail	<i>Ophiogomphus howei</i> Pygmy snaketail
<i>Lithasia armigera</i> Armored rocksnail	<i>Pseudanophthalmus calcareus</i> Limestone cave beetle
<i>Lithasia geniculata</i> Ornate rocksnail	<i>Pseudanophthalmus frigidus</i> Icebox cave beetle
<i>Lithasia salebrosa</i> Muddy rocksnail	<i>Pseudanophthalmus hypolithos</i> Stone-dwelling cave beetle
<i>Lithasia verrucosa</i> Varicose rocksnail	<i>Pseudanophthalmus rogersae</i> Roger's cave beetle
Insects	<i>Pseudanophthalmus scholasticus</i> Schoolhouse cave beetle
<i>Cheumatopsyche helma</i> Helma's cheumatopsyche caddisfly	<i>Stylurus notatus</i> Elusive clubtail
<i>Dryobius sexnotatus</i> Six-banded longhorn beetle	

TELEPHONE MEMORANDUM

U. S. EPA Region IV
Simmons Casket Company
Dix River & its tributaries
fishery information

BVWST Project 52011.020
BVWST File
May 21, 1992
8:30 a.m.

To: Brent Kuhl, Ecology Specialist
Company: Environmental Science and Engineering, Inc.
Phone No.: 314-567-4600

Recorded by: Carter Helm

Mr. Kuhl authored the August 1991 Report, Kentucky River Aquatic Study, and offered the following information: the Turkey Creek, Gilberts Creek and the Dix River all have been used for recreational fishing. The Dix River is used for recreational swimming. There are no commercial fisheries in the area. The following species are recreationally fished: shiners, bluegill, large mouth bass, white bass, channel catfish, brown trout and rainbow trout.

i

SIMMONS CASKET COMPANY

LATITUDE 37:36:21 LONGITUDE 84:34:35 1980 POPULATION

	0.00-.400	.400-.810	.810-1.60	1.60-3.20	3.20-4.80	4.80-6.40	SECTOR TOTALS
S 1	0	7	1534	1831	0	0	3372
S 2	0	0	1813	0	0	0	1813
S 3	0	0	0	0	0	0	0
S 4	0	0	0	0	0	0	0
S 5	0	0	0	0	0	0	0
S 6	0	0	0	0	0	1614	1614
S 7	0	0	0	0	0	0	0
S 8	0	0	0	0	0	0	0
RING	0	7	3347	1831	0	1614	6799
TOTALS							

press RETURN to continue

MENU: Geodata Handling Data List procedures

Enter name (in parentheses)

(RENAME)

or a command: HELP, HELP option, BACK, CLEAR, EXIT, TUTOR

GEMS> next

[ERR-039]

Type YES to confirm the EXIT command; type NO to restart GEMS

GEMS> yes

\$ logout

HTW logged out at 10-JUN-1992 14:06:36.30

Itemized resource charges, for this session, follow:

NODE: VAXTM1

ACCT: 9040

PROJ: GEMS0001

USER: HTW

UIC: [000710,000012]

BAUD:

START TIME: 10-JUN-1992 14:04:10.40

FINISH TIME: 10-JUN-1992 14:06:36.30

BILLING PERIOD: 920601

WEEKDAY: WEDNESDAY

TERMINAL PORT: VTA1003

DESCRIPTION OF CHARGE	QUANTITY	EXPENDITURE
ALL CHARGE LEVELS		
300 baud (Seconds)	146	0.0000
CPU TIME (Seconds)	9	0.5000
TOTAL FOR THIS SESSION		\$ 0.5000

** Note: This total reflects the charges for this process only, subprocesses created during this session are accounted for separately

Enter selection:

SEP 03 1992

4WD-WPB

Carter J. Helm
Project Scientist
B & V Waste Science and Technology Corp.
1117 Perimeter Center West
Suite W-212
Atlanta, Georgia 30338

RE: Simmons Casket Company Site (KYD050074889)
Lancaster, Garrard County, Kentucky
Draft Site Inspection Report

Dear Mr. Helm,

Pursuant to our phone conversation on August 27, 1992, please address the following comments.

Executive Summary, para 3 - Calcium and sodium are not routinely considered contaminants and are not being used as contaminants of concern to score the site. Additionally they are naturally occurring and are probably not the result of past activities or operations at the site.

4.1 Sampling Locations - The waste source area has been calculated incorrectly. Available information does not indicate that this entire large area has been affected by the activities and operations that led to the contamination of the soil in the surface soil samples. Additionally, the two sediment samples cannot be used in conjunction with the surface soil samples to establish a large contaminated soil area unless evidence is available that indicates that this entire area is a source. The sources would be more accurately and realistically characterized as separate areas of contaminated soil associated with each operation (i.e. drum storage area, old loading dock area, dust collector area etc.).

HRS Preliminary Score -Please recalculate the site score utilizing more accurately characterized sources.

If you have any questions regarding these comments, please do not hesitate to call me at (404)347-5065.

Sincerely,

Loften Carr
Site Assessment Manager

cc: H. Weiland, BVWSEE.
bcc: Bozeman, U.S.EPA

LC:m:09/01/92x5065 Disk: V-Wright Doc: simmons.cmt

CARR

DEIHL

9-1-92

[Handwritten signature]

FEB 6 1992

4WD-WPB

Mr. Lynn Osborne
Allison Abrasives
163 Industry Road
Lancaster, Kentucky 40444

RE: Simmons Casket Company
Lancaster, Garrard County, Kentucky
KYD050074889

Dear Mr. Osborne:

As per our phone conversation February 24, 1992, I am enclosing a copy of the Field Study Plan, Site Inspection, Simmons Casket Company, Lancaster, Garrard County, Kentucky. Regarding your request for the file material in the possession of Carter Helm of B & V Waste Science and Technology on the above referenced date, you will need to request in writing this information via the:

U.S. EPA
Freedom of Information Act (FOIA) Office
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Attn: Walton Jones

You may reference our phone conversation and my name in the request letter to insure that the request reaches me in a timely manner. All of the available file information not subject to any FOIA exemptions will be provided to you.

If you have any further questions, please call me at (404) 347-5065.

Sincerely yours,

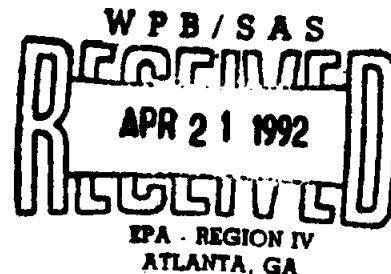
Loften Carr
Site Assessment Manager

Enclosures

LC:m:03/03/92x5065 Disk: Carr Doc: simmons.ltr

CARR DEIHL

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613



*****MEMORANDUM*****

DATE: 04/14/92

To File
KYD 050 074 889

SUBJECT: Results of Extractable Organic Analysis:
92-0331 SIMMONS CASKET CO
LANCASTER KY
CASE NO: 17847

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMAN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

CC:

Charlie Hooper 250 3256

*P.C.B. 1260
80 ug/kg*

*PCB-1260
24000 ug/kg*

ORGANIC DATA QUALIFIER REPORT

Case Number 17847 Project Number 92-0331 SAS Number
 Site ID. Simmons Casket Co., Lancaster, KY.

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Volatiles</u>			
none			
<u>Extractables</u>			
all samples	all extractables	J	excessive extraction holding time
<u>Pesticides</u>			
all samples	aldrin	J	low GPC recovery

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 *** SAMPLE NO. 65462 ***
*** SOURCE: SIMMONS CASKET CO ***
*** STATION ID: SS-01 ***

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 0940 STOP: 00/00/00

*** CASE NO.: 17847 *** SAS NO.: 0. NO.: CL56 ***
*** UG/KG *** ANALYTICAL RESULTS *** UG/KG *** ANALYTICAL RESULTS ***

4400J	PHENOL	1100UJ	3-NITROANILINE
4400J	BIS(2-CHLOROETHYL) ETHER	440UJ	ACENAPHTHENE
4400J	2-CHLOROPHENOL	1100UJ	2,4-DINITROPHENOL
4400J	1,3-DICHLOROBENZENE	1100UJ	4-NITROPHENOL
4400J	1,4-DICHLOROBENZENE	440UJ	DIBENZOFURAN
4400J	1,2-DICHLOROBENZENE	440UJ	2,4-DINITROTOLUENE
4400J	2-METHYLPHENOL	440UJ	DIETHYL PHTHALATE
4400J	2,2'-CHLOROISOPROPYLETHAR	440UJ	4-CHLOROPHENYL PHENYL ETHER
4400J	(3-AND/OR 4-)METHYLPHENOL	440UJ	FLUDRENE
4400J	N-NITROSODI-N-PROPYLAMINE	1100UJ	4-NITROANILINE
4400J	HEXACHLOROETHANE	1100UJ	2-METHYL-4,6-DINITROPHENOL
4400J	NITROBENZENE	440UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
4400J	ISOPHORONE	440UJ	4-BROMOPHENYL PHENYL ETHER
4400J	2-NITROPHENOL	440UJ	HEXACHLOROBENZENE (HCB)
4400J	2,4-DIMETHYLPHENOL	1100UJ	PENTACHLOROPHENOL
4400J	BIS(2-CHLOROETHOXY) METHANE	440UJ	PHENANTHRENE
4400J	1,2,4-TRICHLOROBENZENE	440UJ	ANTHRACENE
4400J	1,2,4-TRICHLOROBENZENE	440UJ	CARBAZOLE
4400J	NAPHTHALENE	440UJ	DI-N-BUTYL PHTHALATE
4400J	4-CHLOROANILINE	440UJ	FLUORANTHENE
4400J	HEXACHLOROBUTADIENE	440UJ	PYRENE
4400J	4-CHLORO-3-METHYLPHENOL	440UJ	BENZYL BUTYL PHTHALATE
4400J	2-METHYLNAPHTHALENE	440UJ	3,3'-DICHLOROBENZIDINE
4400J	HEXACHLOROCYCLOPENTADIENE (HCCP)	440UJ	BENZO(A)ANTHRACENE
1100UJ	2,4,6-TRICHLOROPHENOL	440UJ	CHRYSENE
4400J	2-CHLORONAPHTHALENE	440UJ	BIS(2-ETHYLHEXYL) PHTHALATE
1100UJ	2-NITROANILINE	440UJ	DI-N-OCTYL PHTHALATE
4400J	DIMETHYL PHTHALATE	440UJ	BENZO(B AND/OR K)FLUORANTHENE
4400J	ACENAPHTHYLENE	440UJ	BENZO-A-PYRENE
4400J	2,6-DINITROTOLUENE	440UJ	INDENO (1,2,3-CD) PYRENE
		440UJ	DIBENZO(A,H)ANTHRACENE
		26	BENZO(GHI)PERYLENE
			PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

04/13/92

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 1300 STOP: 00/00/00

D. NO.: CL58

ANALYTICAL RESULTS
G/KG

ANALYTICAL RESULTS
G/KG

000UJ	3-NITROANILINE
000UJ	ACENAPHTHENE
000UJ	2, 4-DINITROPHENOL
000UJ	4-NITROPHENOL
000UJ	DIBENZOFURAN
000UJ	2, 4-DINITROTOLUENE
000UJ	DIETHYL PHTHALATE
000UJ	4-CHLOROPHENYL PHENYL ETHER
000UJ	FLUORENE
000UJ	4-NITROANILINE
000UJ	2-METHYL-4, 6-DINITROPHENOL
000UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
000UJ	4-BROMOPHENYL PHENYL ETHER
000UJ	HEXACHLOROBENZENE (HCB)
000UJ	PENTACHLOROPHENOL
370UJ	PHENANTHRENE
73UJ	ANTHRACENE
000UJ	CARBAZOLE
000UJ	DI-N-BUTYL PHTHALATE
410UJ	FLUORANTHENE
280UJ	PYRENE
000UJ	BENZYL BUTYL PHTHALATE
000UJ	3, 3'-DICHLOROBENZIDINE
180UJ	BENZO(A)ANTHRACENE
180UJ	CHRYSENE
000UJ	BIS(2-ETHYLHEXYL) PHTHALATE
000UJ	DI-N-OCTYL PHTHALATE
2240UJ	BENZO(B AND/OR K)FLUORANTHENE
000UJ	BENZO-A-PYRENE
000UJ	INDENO (1, 2, 3-CD) PYRENE
000UJ	DIBENZO(A,H)ANTHRACENE
000UJ	BENZO(GH)PERYLENE
34	PERCENT MOISTURE

REMARKS

VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
KNOWN TO BE GREATER THAN VALUE GIVEN
QUANTITATION LIMIT. REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 *** SAMPLE NO. 65465 ***
*** SOURCE: SIMMONS CASKET CO ***
*** STATION ID: SD-03 ***

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 1340 STOP: 00/00/00

*** CASE NO.: 17847 *** SAS NO.: ***
UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

4300J	PHENOL	1100J	3-NITROANILINE
4300J	BIS(2-CHLOROETHYL) ETHER	4300J	ACENAPHTHENE
4300J	2-CHLOROPHENOL	1100J	2,4-DINITROPHENOL
4300J	1,3-DICHLOROBENZENE	1100J	4-NITROPHENOL
4300J	1,4-DICHLOROBENZENE	4300J	DIBENZOFURAN
4300J	1,2-DICHLOROBENZENE	4300J	2,4-DINITROTOLUENE
4300J	2-METHYLPHENOL	4300J	DIETHYL PHTHALATE
4300J	2,2'-CHLORISOPROPYLETHYER	4300J	4-CHLOROPHENYL PHENYL ETHER
4300J	(3-AND/OR 4-)METHYLPHENOL	4300J	FLUORENE
4300J	N-NITROSODI-N-PROPYLAMINE	1100J	4-NITROANILINE
4300J	HEXACHLOROETHANE	1100J	2-METHYL-4,6-DINITROPHENOL
4300J	NITROBENZENE	4300J	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
4300J	ISOPHORONE	4300J	4-BROMOPHENYL PHENYL ETHER
4300J	2-NITROPHENOL	1100J	HEXACHLOROBENZENE (HCB)
4300J	BIS(2-CHLOROETHOXY) METHANE	68J	PENTACHLOROPHENOL
4300J	2,4-DICHLOROPHENOL	4300J	PHENANTHRENE
4300J	1,2,4-TRICHLOROBENZENE	4300J	ANTHRACENE
4300J	NAPHTHALENE	4300J	CARBAZOLE
4300J	4-CHLOROANILINE	4300J	DI-N-BUTYL PHTHALATE
4300J	HEXACHLOROBUTADIENE	140J	FLUORANTHENE
4300J	2-METHYLNAPHTHALENE	130J	PYRENE
4300J	HEXACHLOROCYCLOPENTADIENE (HCCP)	7700J	BENZYL BUTYL PHTHALATE
4300J	2,4,6-TRICHLOROPHENOL	4300J	3,3'-DICHLOROBENZIDINE
1100J	2,4,5-TRICHLOROPHENOL	100J	BENZO(A)ANTHRACENE
4300J	2-CHLORONAPHTHALENE	100J	CHRYSENE
1100J	2-NITROANILINE	4300J	BIS(2-ETHYLHEXYL) PHTHALATE
4300J	DIMETHYL PHTHALATE	4300J	DI-N-OCTYL PHTHALATE
4300J	ACENAPHTHYLENE	4300J	BENZO(B AND/OR K)FLUORANTHENE
4300J	2,6-DINITROTOLUENE	4300J	BENZO-A-PYRENE
		4300J	INDENO (1,2,3-CD) PYRENE
		4300J	DIBENZO(A,H)ANTHRACENE
		4300J	BENZO(GH)PERYLENE
		22	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT
*** PROJECT NO. 92-0331 SAMPLE NO. 65466
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: B. STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 1450 STOP: 00/00/00

CASE NO.: 17847 SAS NO.:
UG/KG ANALYTICAL RESULTS D. NO.: CL60 UG/KG ANALYTICAL RESULTS

540UJ	PHENOL	1400UJ	3-NITROANILINE
540UJ	BIS(2-CHLOROETHYL) ETHER	540UJ	ACENAPHTHENE
540UJ	2-CHLOROPHENOL	1400UJ	2,4-DINITROPHENOL
540UJ	1,3-DICHLOROBENZENE	1400UJ	4-NITROPHENOL
540UJ	1,4-DICHLOROBENZENE	540UJ	DIBENZOFURAN
540UJ	2-METHYLPHENOL	540UJ	2,4-DINITROTOLUENE
540UJ	2,2'-CHLOROSOPROPYLETHYER	540UJ	DIETHYL PHTHALATE
540UJ	(3-AND/OR 4-) METHYLPHENOL	540UJ	4-CHLOROPHENYL PHENYL ETHER
540UJ	N-NITROSODI-N-PROPYLAMINE	540UJ	FLUORENE
540UJ	HEXACHLOROETHANE	1400UJ	4-NITROANILINE
540UJ	NITROBENZENE	1400UJ	2-METHYL-4,6-DINITROPHENOL
540UJ	ISOPHORONE	540UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
540UJ	2-NITROPHENOL	540UJ	4-BROMOPHENYL PHENYL ETHER
540UJ	2,4-DIMETHYLPHENOL	540UJ	HEXACHLOROBENZENE (HCB)
540UJ	BIS(2-CHLOROETHOXY) METHANE	1400UJ	PENTACHLOROPHENOL
540UJ	2,4-DICHLOROPHENOL	540UJ	PHENANTHRENE
540UJ	1,2,4-TRICHLOROBENZENE	540UJ	ANTHRACENE
540UJ	NAPHTHALENE	540UJ	CARBAZOLE
540UJ	4-CHLOROANILINE	540UJ	DI-N-BUTYL PHTHALATE
540UJ	HEXACHLOROBUTADIENE	540UJ	FLUORANTHENE
540UJ	4-CHLORO-3-METHYLPHENOL	540UJ	PYRENE
540UJ	2-METHYLNAPHTHALENE	650J	BENZYL BUTYL PHTHALATE
540UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)	540UJ	3,3'-DICHLOROBENZIDINE
540UJ	2,4,6-TRICHLOROPHENOL	540UJ	BENZO(A)ANTHRACENE
1400UJ	2,4,5-TRICHLOROPHENOL	540UJ	CHRYSENE
540UJ	2-CHLORONAPHTHALENE	540UJ	BIS(2-ETHYLHEXYL) PHTHALATE
1400UJ	2-NITROANILINE	540UJ	DI-N-OCTYL PHTHALATE
540UJ	DIMETHYL PHTHALATE	540UJ	BENZO(B AND/OR K)FLUORANTHENE
540UJ	ACENAPHTHYLENE	540UJ	BENZO-A-PYRENE
540UJ	2,6-DINITROTOLUENE	540UJ	INDENO (1,2,3-CD) PYRENE
		540UJ	DIBENZO(A,H)ANTHRACENE
		540UJ	BENZO(GH)PERYLENE
		40	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SS-02
*** CASE NO.: 17847
*** SAS NO.:
*** D. NO.: CL61
*** ANALYTICAL RESULTS
*** ANALYTICAL RESULTS
*** ANALYTICAL RESULTS

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST: KY
COLLECTION START: 02/26/92 1525 STOP: 00/00/00

*** UG/KG
*** ANALYTICAL RESULTS
*** ANALYTICAL RESULTS
*** ANALYTICAL RESULTS

5300J	PHENOL	1200UJ	3-NITROANILINE
490UJ	BIS(2-CHLOROETHYL) ETHER	490UJ	ACENAPHTHENE
490UJ	2-CHLOROPHENOL	1200UJ	2,4-DINITROPHENOL
490UJ	1,3-DICHLOROBENZENE	1200UJ	4-NITROPHENOL
490UJ	1,4-DICHLOROBENZENE	490UJ	DIBENZOFURAN
490UJ	1,2-DICHLOROBENZENE	490UJ	2,4-DINITROTOLUENE
60J	2-METHYLPHENOL	490UJ	DIETHYL PHTHALATE
490UJ	2,2'-CHLOROISOPROPYLETHYER	490UJ	4-CHLOROPHENYL PHENYL ETHER
66J	(3-AND/OR 4-)METHYLPHENOL	490UJ	FLUORENE
490UJ	N-NITROSODI-N-PROPYLAMINE	490UJ	4-NITROANILINE
490UJ	HEXACHLOROETHANE	490UJ	2-METHYL-4,6-DINITROPHENOL
490UJ	NITROBENZENE	490UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
490UJ	ISOPHORONE	490UJ	4-BROMOPHENYL PHENYL ETHER
490UJ	2-NITROPHENOL	1200UJ	HEXACHLOROBENZENE (HCB)
490UJ	2,4-DIMETHYLPHENOL	380J	PENTACHLOROPHENOL
490UJ	BIS(2-CHLOROETHOXY) METHANE	83J	PHENANTHRENE
490UJ	2,4-DICHLOROPHENOL	490UJ	ANTHRACENE
490UJ	1,2,4-TRICHLOROBENZENE	490UJ	CARBAZOLE
490UJ	NAPHTHALENE	610J	DI-N-BUTYLPHTHALATE
490UJ	4-CHLOROANILINE	670J	FLUORANTHENE
490UJ	HEXACHLOROBUTADIENE	3700J	PYRENE
490UJ	4-CHLORO-3-METHYLPHENOL	490UJ	BENZYL BUTYL PHTHALATE
490UJ	2-METHYLNAPHTHALENE	540J	3,3'-DICHLOROBENZIDINE
490UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)	730J	BENZO(A)ANTHRACENE
1200UJ	2,4,5-TRICHLOROPHENOL	490UJ	CHRYSENE
490UJ	2,4,6-TRICHLOROPHENOL	490UJ	BIS(2-ETHYLHEXYL) PHTHALATE
1200UJ	2-CHLORONAPHTHALENE	1200UJ	DI-N-OCTYLPHTHALATE
490UJ	2-NITROANILINE	490UJ	BENZO(B AND/OR K)FLUORANTHENE
490UJ	DIMETHYL PHTHALATE	490UJ	BENZO-A-PYRENE
490UJ	ACENAPHTHYLENE	490UJ	INDENO (1,2,3-CD) PYRENE
490UJ	2,6-DINITROTOLUENE	490UJ	DIBENZO(A,H)ANTHRACENE
		490UJ	BENZO(GH)PERYLENE
		32	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SS-03

*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER ST: KY
*** COLLECTION START: 02/26/92 1630 STOP: 00/00/00

*** CASE NO.: 17847

D. NO.: CL62

SAS NO.:

UG/KG

ANALYTICAL RESULTS

UG/KG

ANALYTICAL RESULTS

980J PHENOL
4400J BIS(2-CHLOROETHYL) ETHER
4400J 2-CHLOROPHENOL
4400J 1,3-DICHLOROBENZENE
4400J 1,4-DICHLOROBENZENE
4400J 1,2-DICHLOROBENZENE
4400J 2-METHYLPHENOL
4400J 2,2'-CHLOROISOPROPYLETH
4400J (3-AND/OR 4-METHYLPHENOL
4400J N-NITROSODI-N-PROPYLAMINE
4400J HEXACHLOROETHANE
4400J NITROBENZENE
4400J ISOPHORONE
4400J 2-NITROPHENOL
4400J 2,4-DIMETHYLPHENOL
4400J BIS(2-CHLOROETHOXY) METHANE
4400J 2,4-DICHLOROPHENOL
4400J 1,2,4-TRICHLOROBENZENE
4400J NAPHTHALENE
4400J 4-CHLOROANILINE
4400J HEXACHLOROBUTADIENE
4400J 4-CHLORO-3-METHYLPHENOL
4400J 2-METHYLNAPHTHALENE
4400J HEXACHLOROCYCLOPENTADIENE (HCCP)
4400J 2,4,6-TRICHLOROPHENOL
11000J 2,4,5-TRICHLOROPHENOL
4400J 2-CHLORONAPHTHALENE
11000J 2-NITROANILINE
4400J DIMETHYL PHTHALATE
4400J ACENAPHTHYLENE
4400J 2,6-DINITROTOLUENE

11000J 3-NITROANILINE
4400J ACENAPHTHENE
11000J 2,4-DINITROPHENOL
11000J 4-NITROPHENOL
4400J DIBENZOFURAN
4400J 2,4-DINITROTOLUENE
4400J DIETHYL PHTHALATE
4400J 4-CHLOROPHENYL PHENYL ETHER
4400J FLUORENE
11000J 4-NITROANILINE
11000J 2-METHYL-4,6-DINITROPHENOL
4400J N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
4400J 4-BROMOPHENYL PHENYL ETHER
4400J HEXACHLOROBENZENE (HCB)
11000J PENTACHLOROPHENOL
4400J PHENANTHRENE
4400J ANTHRACENE
4400J CARBAZOLE
4400J DI-N-BUTYLPHTHALATE
4400J FLUORANTHENE
4400J PYRENE
4400J BENZYL BUTYL PHTHALATE
4400J 3,3'-DICHLOROBENZIDINE
4400J BENZO(A)ANTHRACENE
4400J CHRYSENE
4400J BIS(2-ETHYLHEXYL) PHTHALATE
4400J DI-N-OCTYLPHTHALATE
4400J BENZO(B AND/OR K)FLUORANTHENE
4400J BENZO-A-PYRENE
4400J INDENO (1,2,3-CD) PYRENE
4400J DIBENZO(A,H)ANTHRACENE
4400J BENZO(GH)PERYLENE
25 PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SS-05
*** CASE NO.: 17847
*** ANALYTICAL RESULTS

PROG ELEM: NSF COLLECTED BY: B STAFFORD
CITY: LANCASTER ST. KY
COLLECTION START: 02/26/92 1755 STOP: 00/00/00

D. NO.: CL64

SAS NO.:

UG/KG ANALYTICAL RESULTS

ANALYTICAL RESULTS

3200J	PHENOL	1100UJ	3-NITROANILINE
4200J	BIS(2-CHLOROETHYL) ETHER	4200J	ACENAPHTHENE
4200J	2-CHLOROPHENOL	1100UJ	2,4-DINITROPHENOL
4200J	1,3-DICHLOROBENZENE	4200J	4-NITROPHENOL
4200J	1,4-DICHLOROBENZENE	4200J	DIBENZOFURAN
4200J	1,2-DICHLOROBENZENE	4200J	2,4-DINITROTOLUENE
51J	2-METHYLPHENOL	4200J	DIETHYL PHTHALATE
4200J	2,2'-CHLOROISOPROPYLETHYR	4200J	4-CHLOROPHENYL PHENYL ETHER
49J	(3-AND/OR 4-METHYLPHENOL	4200J	FLUORENE
4200J	N-NITROSODI-N-PROPYLAMINE	1100UJ	4-NITROANILINE
4200J	HEXACHLOROETHANE	1100UJ	2-METHYL-4,6-DINITROPHENOL
4200J	NITROBENZENE	4200J	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
4200J	ISOPHORONE	4200J	4-BROMOPHENYL PHENYL ETHER
4200J	2-NITROPHENOL	4200J	HEXACHLOROBENZENE (HCB)
4200J	2,4-DIMETHYLPHENOL	1100UJ	PENTACHLOROPHENOL
4200J	BIS(2-CHLOROETHOXY) METHANE	4200J	PHENANTHRENE
4200J	2,4-DICHLOROPHENOL	4200J	ANTHRACENE
4200J	1,2,4-TRICHLOROBENZENE	4200J	CARBAZOLE
4200J	NAPHTHALENE	4200J	DI-N-BUTYLPHTHALATE
4200J	4-CHLOROANILINE	4200J	FLUORANTHENE
4200J	HEXACHLOROBUTADIENE	1100UJ	BENZYL BUTYL PHTHALATE
4200J	4-CHLORO-3-METHYLPHENOL	4200J	3,3'-DICHLOROBENZIDINE
4200J	2-METHYLNAPHTHALENE	4200J	BENZO(A)ANTHRACENE
4200J	HEXACHLOROCYCLOPENTADIENE (HCCP)	4200J	CHRYSENE
4200J	2,4,6-TRICHLOROPHENOL	4200J	BIS(2-ETHYLHEXYL) PHTHALATE
1100UJ	2,4,5-TRICHLOROPHENOL	4200J	DI-N-OCTYLPHTHALATE
4200J	2-CHLORONAPHTHALENE	4200J	BENZO(B AND/OR K)FLUORANTHENE
1100UJ	2-NITROANILINE	4200J	BENZO-A-PYRENE
4200J	DIMETHYL PHTHALATE	4200J	INDENO (1,2,3-CD) PYRENE
4200J	ACENAPHTHYLENE	4200J	DIBENZO(A,H)ANTHRACENE
4200J	2,6-DINITROTOLUENE	4200J	BENZO(GH)PERYLENE
		22	PERCENT MOISTURE

ANALYTICAL RESULTS

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

EXTRACTABLE ORGANICS DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SS-06
*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER ST: KY
*** COLLECTION START: 02/26/92 1820 STOP: 00/00/00

*** CASE NO.: 17847 SAS NO.: D. NO.: CL65
*** UG/KG ANALYTICAL RESULTS ANALYTICAL RESULTS

380UJ	PHENOL	950UJ	3-NITROANILINE
380UJ	BIS(2-CHLOROETHYL) ETHER	380UJ	ACENAPHTHENE
380UJ	2-CHLOROPHENOL	950UJ	2,4-DINITROPHENOL
380UJ	1,3-DICHLOROBENZENE	950UJ	4-NITROPHENOL
380UJ	1,4-DICHLOROBENZENE	380UJ	DIBENZOFURAN
380UJ	1,2-DICHLOROBENZENE	380UJ	2,4-DINITROTOLUENE
380UJ	2-METHYLPHENOL	380UJ	DIETHYL PHTHALATE
380UJ	2,2'-CHLORISOPROPYLETHET	380UJ	4-CHLOROPHENYL PHENYL ETHER
380UJ	(3-AND/OR 4-)METHYLPHENOL	380UJ	FLUORENE
380UJ	N-NITROSODI-N-PROPYLAMINE	950UJ	4-NITROANILINE
380UJ	HEXACHLOROETHANE	950UJ	2-METHYL-4,6-DINITROPHENOL
380UJ	NITROBENZENE	380UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380UJ	ISOPHORONE	380UJ	4-BROMOPHENYL PHENYL ETHER
380UJ	2-NITROPHENOL	950UJ	HEXACHLOROBENZENE (HCB)
380UJ	2,4-DIMETHYLPHENOL	950UJ	PENTACHLOROPHENOL
380UJ	BIS(2-CHLOROETHOXY) METHANE	380UJ	PHENANTHRENE
380UJ	2,4-DICHLOROPHENOL	380UJ	ANTHRACENE
380UJ	1,2,4-TRICHLOROBENZENE	380UJ	CARBAZOLE
380UJ	NAPHTHALENE	380UJ	DI-N-BUTYLPHTHALATE
380UJ	4-CHLOROANILINE	380UJ	FLUORANTHENE
380UJ	HEXACHLOROBUTADIENE	380UJ	PYRENE
380UJ	4-CHLORO-3-METHYLPHENOL	380UJ	BENZYL BUTYL PHTHALATE
380UJ	2-METHYLNAPHTHALENE	380UJ	3,3'-DICHLOROBENZIDINE
380UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)	380UJ	BENZO(A)ANTHRACENE
380UJ	2,4,6-TRICHLOROPHENOL	380UJ	CHRYSENE
950UJ	2,4,5-TRICHLOROPHENOL	380UJ	BIS(2-ETHYLHEXYL) PHTHALATE
380UJ	2-CHLORONAPHTHALENE	380UJ	DI-N-OCTYLPHTHALATE
950UJ	2-NITROANILINE	380UJ	BENZO(B AND/OR K)FLUORANTHENE
380UJ	DIMETHYL PHTHALATE	380UJ	BENZO-A-PYRENE
380UJ	ACENAPHTHYLENE	380UJ	INDENO (1,2,3-CD) PYRENE
380UJ	2,6-DINITROTOLUENE	380UJ	DIBENZO(A,H)ANTHRACENE
		380UJ	BENZO(GH)PERYLENE
			PERCENT MOISTURE
		12	

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

*NA-NOT ANALYZED
*NAI-INTERFERENCES
*J-ESTIMATED VALUE
*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-01 COLLECTION START: 02/26/92 1130 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL57 MD NO: CL57 **
** **

ANALYTICAL RESULTS UG/KG

3000J 3 UNIDENTIFIED COMPOUNDS

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-02 COLLECTION START: 02/26/92 1300 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL58 MD NO: CL58 **
** **

ANALYTICAL RESULTS UG/KG

600J 1 UNIDENTIFIED COMPOUND

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-03 COLLECTION START: 02/26/92 1340 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL59 MD NO: CL59 **

ANALYTICAL RESULTS UG/KG

90JN BENZOTHIAZOLE

REMARKS

EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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***
** PROJECT NO. 92-0331  SAMPLE NO. 65466  SAMPLE TYPE: SOIL  PROG ELEM: NSF  COLLECTED BY: B STAFFORD  **
** SOURCE: SIMMONS CASKET CO  CITY: LANCASTER  ST: KY  **
** STATION ID: SD-04  COLLECTION START: 02/26/92  1450  STOP: 00/00/00  **
** CASE NO.: 17847  SAS NO.:  D. NO.: CL60  MD NO: CL60  **
**
***
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ANALYTICAL RESULTS UG/KG

2000J 1 UNIDENTIFIED COMPOUND

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL61 MD NO: CL61 **
**

ANALYTICAL RESULTS UG/KG

1000JN	HYDROXYBENZALDEHYDE (2 ISOMERS)
100JN	HYDROXYBENZONITRILE
6000JN	METHYLENEBISPHENOL (3 ISOMERS)
3000J	3 UNIDENTIFIED COMPOUNDS

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-03 COLLECTION START: 02/26/92 1630 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL62 MD NO: CL62 **
**

ANALYTICAL RESULTS UG/KG

400JN HYDROXYBENZALDEHYDE (2 ISOMERS)
2000JN METHYLENEBISPHENOL (2 ISOMERS)

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-04 COLLECTION START: 02/26/92 1705 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL63 MD NO: CL63 **
**

ANALYTICAL RESULTS UG/KG

1000JN	HYDROXYBENZALDEHYDE (2 ISOMERS)
200JN	HYDROXYBENZENEMETHANOL
90JN	HYDROXYBENZENEACETIC ACID
10000JN	METHYLENEBISPHENOL (2 ISOMERS)

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-05 COLLECTION START: 02/26/92 1755 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL64 MD NO: CL64 **
** ***
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ANALYTICAL RESULTS UG/KG

80JN PHTHALIC ANHYDRIDE
300JN BIS(DIMETHYLETHYL)CYCLOHEXADIENEDIONE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL65 MD NO: CL65 **
** ***
```

ANALYTICAL RESULTS UG/KG

2000JN BIS(DIMETHYLETHYL)CYCLOHEXADIENEDIONE
20000J 12 UNIDENTIFIED COMPOUNDS
PETROLEUM PRODUCT

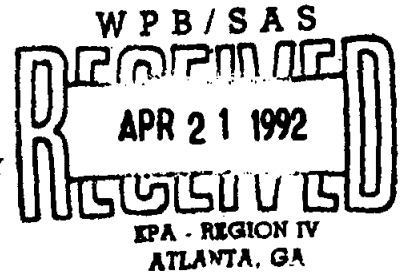
REMARKS
EXCESSIVE HOLDING TIME

REMARKS

FOOTNOTES

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613



*****MEMORANDUM*****

DATE: 04/14/92

SUBJECT: Results of Purgeable Organic Analysis;
92-0331 SIMMONS CASKET CO
LANCASTER KY
CASE NO: 17847

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMAN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

CC:

ORGANIC DATA QUALIFIER REPORT

Case Number 17847 Project Number 92-0331 SAS Number
 Site ID. Simmons Casket Co., Lancaster, KY.

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Volatiles</u>			
none			
<u>Extractables</u>			
all samples	all extractables	J	excessive extraction holding time
<u>Pesticides</u>			
all samples	aldrin	J	low GPC recovery

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

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*** ** ** ** **
** PROJECT NO. 92-0331  SAMPLE NO. 65462  SAMPLE TYPE: SOIL  PROG ELEM: NSF  COLLECTED BY: B STAFFORD  **
** SOURCE: SIMMONS CASKET CO  CITY: LANCASTER  ST: KY  **
** STATION ID: SS-01  COLLECTION START: 02/26/92  0940  STOP: 00/00/00  **
** CASE NO.: 17847  SAS NO.:  D. NO.: CL56  **
*** ** ** ** *
UG/KG  ANALYTICAL RESULTS  UG/KG  ANALYTICAL RESULTS

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14U CHLOROMETHANE
14U BROMOMETHANE
14U VINYL CHLORIDE
14U CHLOROETHANE
30U METHYLENE CHLORIDE
14U ACETONE
14U CARBON DISULFIDE
14U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
14U 1,1-DICHLOROETHANE
14U 1,2-DICHLOROETHENE (TOTAL)
14U CHLOROFORM
14U 1,2-DICHLOROETHANE
14U METHYL ETHYL KETONE
14U 1,1,1-TRICHLOROETHANE
14U CARBON TETRACHLORIDE
14U BROMODICHLOROMETHANE

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14U 1,2-DICHLOROPROPANE
14U CIS-1,3-DICHLOROPROPENE
14U TRICHLOROETHENE(TRICHLOROETHYLENE)
14U DIBROMOCHLOROMETHANE
14U 1,1,2-TRICHLOROETHANE
14U BENZENE
14U TRANS-1,3-DICHLOROPROPENE
14U BROMOFORM
14U METHYL ISOBUTYL KETONE
14U METHYL BUTYL KETONE
14U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
14U 1,1,2,2-TETRACHLOROETHANE
14U TOLUENE
14U CHLOROBENZENE
14U ETHYL BENZENE
14U STYRENE
14U TOTAL XYLENES
26 PERCENT MOISTURE

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REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-01 COLLECTION START: 02/26/92 1130 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL57 **
*** **

UG/KG ANALYTICAL RESULTS

20U CHLOROMETHANE
20U BROMOMETHANE
20U VINYL CHLORIDE
20U CHLOROETHANE
40U METHYLENE CHLORIDE
20U ACETONE
20U CARBON DISULFIDE
20U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
20U 1,1-DICHLOROETHANE
20U 1,2-DICHLOROETHENE (TOTAL)
20U CHLOROFORM
20U 1,2-DICHLOROETHANE
20U METHYL ETHYL KETONE
20U 1,1,1-TRICHLOROETHANE
20U CARBON TETRACHLORIDE
20U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

20U 1,2-DICHLOROPROPANE
20U CIS-1,3-DICHLOROPROPENE
20U TRICHLOROETHENE(TRICHLOROETHYLENE)
20U DIBROMOCHLOROMETHANE
20U 1,1,2-TRICHLOROETHANE
20U BENZENE
20U TRANS-1,3-DICHLOROPROPENE
20U BROMOFORM
20U METHYL ISOBUTYL KETONE
20U METHYL BUTYL KETONE
20U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
20U 1,1,2,2-TETRACHLOROETHANE
20U TOLUENE
20U CHLOROBENZENE
20U ETHYL BENZENE
20U STYRENE
20U TOTAL XYLENES
49 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-02 COLLECTION START: 02/26/92 1300 STOP: 00/00/00 **
**
** CASE NO.: 17847 SAS NO.: D. NO.: CL58 **
*** **
UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

15U CHLOROMETHANE
15U BROMOMETHANE
15U VINYL CHLORIDE
15U CHLOROETHANE
40U METHYLENE CHLORIDE
15U ACETONE
15U CARBON DISULFIDE
15U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
15U 1,1-DICHLOROETHANE
15U 1,2-DICHLOROETHENE (TOTAL)
15U CHLOROFORM
15U 1,2-DICHLOROETHANE
15U METHYL ETHYL KETONE
15U 1,1,1-TRICHLOROETHANE
15U CARBON TETRACHLORIDE
15U BROMODICHLOROMETHANE

15U 1,2-DICHLOROPROPANE
15U CIS-1,3-DICHLOROPROPENE
15U TRICHLOROETHENE(TRICHLOROETHYLENE)
15U DIBROMOCHLOROMETHANE
15U 1,1,2-TRICHLOROETHANE
15U BENZENE
15U TRANS-1,3-DICHLOROPROPENE
15U BROMOFORM
15U METHYL ISOBUTYL KETONE
15U METHYL BUTYL KETONE
15U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
15U 1,1,2,2-TETRACHLOROETHANE
15U TOLUENE
15U CHLOROBENZENE
15U ETHYL BENZENE
15U STYRENE
15U TOTAL XYLENES
34 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

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*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL   PROG ELEM: NSF   COLLECTED BY: B STAFFORD   **
** SOURCE: SIMMONS CASKET CO   CITY: LANCASTER   ST: KY   **
** STATION ID: SD-03   COLLECTION START: 02/26/92 1340 STOP: 00/00/00   **
** CASE NO.: 17847   SAS NO.:   D. NO.: CL59   **
*** **
UG/KG   ANALYTICAL RESULTS   UG/KG   ANALYTICAL RESULTS

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13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
30U METHYLENE CHLORIDE
13U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13U 1,1,1-TRICHLOROETHANE
13U CARBON TETRACHLORIDE
13U BROMODICHLOROMETHANE

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13U 1,2-DICHLOROPROPANE
13U CIS-1,3-DICHLOROPROPENE
13U TRICHLOROETHENE(TRICHLOROETHYLENE)
13U DIBROMOCHLOROMETHANE
13U 1,1,2-TRICHLOROETHANE
13U BENZENE
13U TRANS-1,3-DICHLOROPROPENE
13U BROMOFORM
13U METHYL ISOBUTYL KETONE
13U METHYL BUTYL KETONE
13U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U 1,1,2,2-TETRACHLOROETHANE
13U TOLUENE
13U CHLOROBENZENE
13U ETHYL BENZENE
13U STYRENE
13U TOTAL XYLENES
22 PERCENT MOISTURE

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REMARKS

REMARKS

FOOTNOTES

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*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

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*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-04 COLLECTION START: 02/26/92 1450 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL60 **
*** **
UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

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17U CHLOROMETHANE
 17U BROMOMETHANE
 17U VINYL CHLORIDE
 17U CHLOROETHANE
 30U METHYLENE CHLORIDE
 17U ACETONE
 17U CARBON DISULFIDE
 17U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
 17U 1,1-DICHLOROETHANE
 17U 1,2-DICHLOROETHENE (TOTAL)
 17U CHLOROFORM
 17U 1,2-DICHLOROETHANE
 17U METHYL ETHYL KETONE
 17U 1,1,1-TRICHLOROETHANE
 17U CARBON TETRACHLORIDE
 17U BROMODICHLOROMETHANE

17U 1,2-DICHLOROPROPANE
 17U CIS-1,3-DICHLOROPROPENE
 17U TRICHLOROETHENE(TRICHLOROETHYLENE)
 17U DIBROMOCHLOROMETHANE
 17U 1,1,2-TRICHLOROETHANE
 17U BENZENE
 17U TRANS-1,3-DICHLOROPROPENE
 17U BROMOFORM
 17U METHYL ISOBUTYL KETONE
 17U METHYL BUTYL KETONE
 17U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
 17U 1,1,2,2-TETRACHLOROETHANE
 17U TOLUENE
 17U CHLOROBENZENE
 17U ETHYL BENZENE
 17U STYRENE
 17U TOTAL XYLENES
 40 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

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*** **
** PROJECT NO. 92-0331  SAMPLE NO. 65467  SAMPLE TYPE: SOIL  PROG ELEM: NSF  COLLECTED BY: B STAFFORD  **
** SOURCE: SIMMONS CASKET CO  CITY: LANCASTER  ST: KY  **
** STATION ID: SS-02  COLLECTION START: 02/26/92  1525  STOP: 00/00/00  **
** CASE NO.: 17847  SAS NO.:  D. NO.: CL61  **
*** **
UG/KG  ANALYTICAL RESULTS  UG/KG  ANALYTICAL RESULTS

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15U CHLOROMETHANE
15U BROMOMETHANE
15U VINYL CHLORIDE
15U CHLOROETHANE
20U METHYLENE CHLORIDE
15U ACETONE
15U CARBON DISULFIDE
15U 1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
15U 1,1-DICHLOROETHANE
15U 1,2-DICHLOROETHENE (TOTAL)
15U CHLOROFORM
15U 1,2-DICHLOROETHANE
15U METHYL ETHYL KETONE
15U 1,1,1-TRICHLOROETHANE
15U CARBON TETRACHLORIDE
15U BROMODICHLOROMETHANE

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15U 1,2-DICHLOROPROPANE
15U CIS-1,3-DICHLOROPROPENE
15U TRICHLOROETHENE (TRICHLOROETHYLENE)
15U DIBROMOCHLOROMETHANE
15U 1,1,2-TRICHLOROETHANE
15U BENZENE
15U TRANS-1,3-DICHLOROPROPENE
15U BROMOFORM
15U METHYL ISOBUTYL KETONE
15U METHYL BUTYL KETONE
15U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
15U 1,1,2,2-TETRACHLOROETHANE
15U TOLUENE
15U CHLOROBENZENE
15U ETHYL BENZENE
15U STYRENE
15U TOTAL XYLENES
32 PERCENT MOISTURE

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REMARKS

REMARKS

FOOTNOTES

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*A-AVERAGE VALUE  *NA-NOT ANALYZED  *NAI-INTERFERENCES  *J-ESTIMATED VALUE  *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN  *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-03 COLLECTION START: 02/26/92 1630 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL62 **

UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
30U METHYLENE CHLORIDE
13U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13U 1,1,1-TRICHLOROETHANE
13U CARBON TETRACHLORIDE
13U BROMODICHLOROMETHANE

13U 1,2-DICHLOROPROPANE
13U CIS-1,3-DICHLOROPROPENE
13U TRICHLOROETHENE(TRICHLOROETHYLENE)
13U DIBROMOCHLOROMETHANE
13U 1,1,2-TRICHLOROETHANE
13U BENZENE
13U TRANS-1,3-DICHLOROPROPENE
13U BROMOFORM
13U METHYL ISOBUTYL KETONE
13U METHYL BUTYL KETONE
13U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U 1,1,2,2-TETRACHLOROETHANE
13U TOLUENE
13U CHLOROBENZENE
13U ETHYL BENZENE
13U STYRENE
13U TOTAL XYLENES
25 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-04 COLLECTION START: 02/26/92 1705 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL63 **
*** **
UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
70U METHYLENE CHLORIDE
13U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13U 1,1,1-TRICHLOROETHANE
13U CARBON TETRACHLORIDE
13U BROMODICHLOROMETHANE

13U 1,2-DICHLOROPROPANE
13U CIS-1,3-DICHLOROPROPENE
13U TRICHLOROETHENE (TRICHLOROETHYLENE)
13U DIBROMOCHLOROMETHANE
13U 1,1,2-TRICHLOROETHANE
13U BENZENE
13U TRANS-1,3-DICHLOROPROPENE
13U BROMOFORM
13U METHYL ISOBUTYL KETONE
13U METHYL BUTYL KETONE
13U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
13U 1,1,2,2-TETRACHLOROETHANE
13U TOLUENE
13U CHLOROBENZENE
13U ETHYL BENZENE
13U STYRENE
13U TOTAL XYLENES
23 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-05 COLLECTION START: 02/26/92 1755 STOP: 00/00/00 **
**
** CASE NO.: 17847 SAS NO.: D. NO.: CL64 **
*** **

UG/KG ANALYTICAL RESULTS

13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
70U METHYLENE CHLORIDE
13U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13U 1,1,1-TRICHLOROETHANE
13U CARBON TETRACHLORIDE
13U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

13U 1,2-DICHLOROPROPANE
13U CIS-1,3-DICHLOROPROPENE
13U TRICHLOROETHENE(TRICHLOROETHYLENE)
13U DIBROMOCHLOROMETHANE
13U 1,1,2-TRICHLOROETHANE
13U BENZENE
13U TRANS-1,3-DICHLOROPROPENE
13U BROMOFORM
13U METHYL ISOBUTYL KETONE
13U METHYL BUTYL KETONE
13U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U 1,1,2,2-TETRACHLOROETHANE
13U TOLUENE
13U CHLOROBENZENE
13U ETHYL BENZENE
13U STYRENE
13U TOTAL XYLENES
22 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PURGEABLE ORGANICS DATA REPORT

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*** **
** PROJECT NO. 92-0331  SAMPLE NO. 65471  SAMPLE TYPE: SOIL  PROG ELEM: NSF  COLLECTED BY: B STAFFORD  **
** SOURCE: SIMMONS CASKET CO  CITY: LANCASTER  ST: KY  **
** STATION ID: SS-06  COLLECTION START: 02/26/92  1820  STOP: 00/00/00  **
** CASE NO.: 17847  SAS NO.:  D. NO.: CL65  **
*** **
UG/KG  ANALYTICAL RESULTS  UG/KG  ANALYTICAL RESULTS

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11U CHLOROMETHANE
11U BROMOMETHANE
11U VINYL CHLORIDE
11U CHLOROETHANE
40U METHYLENE CHLORIDE
40U ACETONE
11U CARBON DISULFIDE
11U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
11U 1,1-DICHLOROETHANE
11U 1,2-DICHLOROETHENE (TOTAL)
11U CHLOROFORM
11U 1,2-DICHLOROETHANE
11U METHYL ETHYL KETONE
11U 1,1,1-TRICHLOROETHANE
11U CARBON TETRACHLORIDE
11U BROMODICHLOROMETHANE

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11U 1,2-DICHLOROPROPANE
11U CIS-1,3-DICHLOROPROPENE
11U TRICHLOROETHENE (TRICHLOROETHYLENE)
11U DIBROMOCHLOROMETHANE
11U 1,1,2-TRICHLOROETHANE
11U BENZENE
11U TRANS-1,3-DICHLOROPROPENE
11U BROMOFORM
11U METHYL ISOBUTYL KETONE
11U METHYL BUTYL KETONE
11U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
11U 1,1,2,2-TETRACHLOROETHANE
11U TOLUENE
11U CHLOROBENZENE
11U ETHYL BENZENE
11U STYRENE
11U TOTAL XYLENES
12 PERCENT MOISTURE

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REMARKS

REMARKS

FOOTNOTES

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*A-AVERAGE VALUE  *NA-NOT ANALYZED  *NAI-INTERFERENCES  *J-ESTIMATED VALUE  *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN  *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

```
*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL65 MD NO: CL65 **
** ***
```

ANALYTICAL RESULTS UG/KG

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7JN DIMETHYLCYCLOHEXANE
8JN DIMETHYLHEPTANE
40JN UNDECANE
30JN DIMETHYLOCTANE
50JN DIMETHYLOCTADECANE
100J 5 UNIDENTIFIED COMPOUNDS
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FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SITE SIMMONS CASKET CO. (S1)
PROJECT # 92-0331

STATE KY

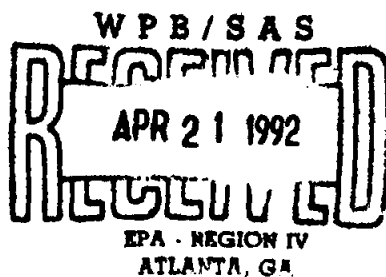
MANAGER JOE SLYKERMAN (B&V)
SHIPWEEK 02/24/92

SOILVOA BOOKED	11	DATA RECEIVED	04/21/92	FOR	10	SAMPLES
H2OVOA BOOKED	5	DATA RECEIVED	/ /	FOR	0	SAMPLES
SOILEXT BOOKED	11	DATA RECEIVED	04/21/92	FOR	10	SAMPLES
H2OEXT BOOKED	5	DATA RECEIVED	/ /	FOR	0	SAMPLES
SOILPEST BOOKED	11	DATA RECEIVED	04/21/92	FOR	10	SAMPLES
H2OPEST BOOKED	5	DATA RECEIVED	/ /	FOR	0	SAMPLES
SOILMET BOOKED	11	DATA RECEIVED	04/09/92	FOR	11	SAMPLES
H2OMET BOOKED	5	DATA RECEIVED	/ /	FOR	0	SAMPLES
SOILCN BOOKED	11	DATA RECEIVED	04/09/92	FOR	11	SAMPLES
H2OCN BOOKED	5	DATA RECEIVED	/ /	FOR	0	SAMPLES

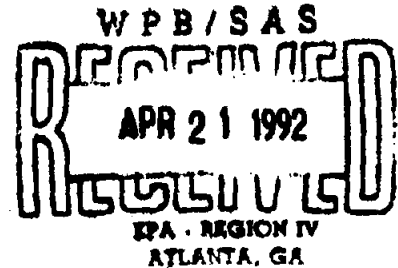
SOILOTH1 BOOKED	0	DATA RECEIVED	/ /	FOR	0	SAMPLES
SOILOTH2 BOOKED	0	DATA RECEIVED	/ /	FOR	0	SAMPLES
H2OOTH1 BOOKED	0	DATA RECEIVED	/ /	FOR	0	SAMPLES
H2OOTH2 BOOKED	0	DATA RECEIVED	/ /	FOR	0	SAMPLES
OTHER1 BOOKED	0	DATA RECEIVED	/ /	FOR	0	SAMPLES
OTHER2 BOOKED	0	DATA RECEIVED	/ /	FOR	0	SAMPLES

LAB(CLP/ESD/FASP/QTM) CLP

REMARKS BOOKED BY ASB IN SAMPLE CONTROL COORDINATOR'S ABSENCE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613



*****MEMORANDUM*****

DATE: 04/14/92

SUBJECT: Results of Pesticide/PCB Analysis;
92-0331 SIMMONS CASKET CO
LANCASTER KY
CASE NO: 17847

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMEN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

CC:

ORGANIC DATA QUALIFIER REPORT

Case Number 17847 Project Number 92-0331 SAS Number
Site ID. Simmons Casket Co., Lancaster, KY.

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Volatiles</u>			
none			
<u>Extractables</u>			
all samples	all extractables	J	excessive extraction holding time
<u>Pesticides</u>			
all samples	aldrin	J	low GPC recovery

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 *** SAMPLE NO. 65462 *** SAMPLE TYPE: SOIL ***
 *** SOURCE: SIMMONS CASKET CO ***
 *** STATION ID: 55-01 ***
 *** CASE NUMBER: 17847 *** SAS NUMBER: ***
 UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

2.3U	ALPHA-BHC	23U	METHOXYCHLOR
2.3U	BETA-BHC	4.5U	ENDRIN KETONE
2.3U	DELTA-BHC	4.5U	ENDRIN ALDEHYDE
2.3U	GAMMA-BHC (LINDANE)	2.3U	CHLORDANE (TECH. MIXTURE) /1
2.3U	HEPTACHLOR	2.3U	GAMMA-CHLORDANE /2
2.3U	ALDRIN	230U	ALPHA-CHLORDANE /2
2.3U	HEPTACHLOR EPOXIDE	45U	TOXAPHENE
2.3U	ENDOSULFAN I (ALPHA)	45U	PCB-1016 (AROCOR 1016)
4.5U	DIELDRIN	90U	PCB-1221 (AROCOR 1221)
4.5U	4,4'-DDE (P,P'-DDE)	45U	PCB-1232 (AROCOR 1232)
4.5U	ENDRIN	45U	PCB-1242 (AROCOR 1242)
4.5U	ENDOSULFAN II (BETA)	45U	PCB-1248 (AROCOR 1248)
4.5U	4,4'-DDD (P,P'-DDD)	45U	PCB-1254 (AROCOR 1254)
4.5U	ENDOSULFAN SULFATE	45U	PCB-1260 (AROCOR 1260)
4.5U	4,4'-DDT (P,P'-DDT)	26	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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 *R-OC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL
 *** SOURCE: SIMMONS CASKET CO
 *** STATION ID: SD-01
 *** CASE NUMBER: 17847
 *** SAS NUMBER:
 *** PROG ELEM: NSF COLLECTED BY: B STAFFORD
 *** CITY: LANCASTER ST: KY STOP: 00/00/00
 *** COLLECTION START: 02/26/92 1130
 *** D. NUMBER: CL57
 *** ANALYTICAL RESULTS

ANALYTICAL RESULTS

UG/KG

ANALYTICAL RESULTS

UG/KG

3.3U ALPHA-BHC	330U METHOXYCHLOR
3.3U BETA-BHC	6.5U ENDRIK KETONE
3.3U DELTA-BHC	6.5U ENDRIK ALDEHYDE
3.3U GAMMA-BHC (LINDANE)	CHLORDANE (TECH. MIXTURE) /1
3.3U HEPTACHLOR	GAMMA-CHLORDANE /2
3.3UJ ALDRIN	ALPHA-CHLORDANE /2
3.3U HEPTACHLOR EPOXIDE	TOXAPHENE
3.3U ENDOSULFAN I (ALPHA)	PCB-1016 (AROCOR 1016)
6.5U DIELDRIN	130U PCB-1221 (AROCOR 1221)
6.5U 4,4'-DDE (P,P'-DDE)	65U PCB-1232 (AROCOR 1232)
6.5U ENDRIK	65U PCB-1242 (AROCOR 1242)
6.5U ENDOSULFAN II (BETA)	65U PCB-1248 (AROCOR 1248)
6.5U 4,4'-DDD (P,P'-DDD)	65U PCB-1254 (AROCOR 1254)
6.5U ENDOSULFAN SULFATE	65U PCB-1260 (AROCOR 1260)
6.5U 4,4'-DDT (P,P'-DDT)	49 PERCENT MOISTURE

REMARKS

REMARKS

*** FOOTNOTES ***
 *A-AVERAGE VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SD-02
*** CASE NUMBER: 17847 SAS NUMBER:

*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER ST: KY
*** COLLECTION START: 02/26/92 1300 STOP: 00/00/00
*** D. NUMBER: CL58

UG/KG ANALYTICAL RESULTS

UG/KG ANALYTICAL RESULTS

2.5U ALPHA-BHC	25U METHOXYCHLOR
2.5U BETA-BHC	4.9U ENDRIK KETONE
2.5U DELTA-BHC	4.9U ENDRIK ALDEHYDE
2.5U GAMMA-BHC (LINDANE)	2.5U CHLORDANE (TECH MIXTURE) /1
2.5U HEPTACHLOR	2.5U GAMMA-CHLORDANE /2
2.5U ALDRIN	250U ALPHA-CHLORDANE
2.5U HEPTACHLOR EPOXIDE	250U TOXAPHENE
2.5U ENDOSULFAN I (ALPHA)	49U PCB-1016 (AROCOR 1016)
4.9U DIELDRIN	99U PCB-1221 (AROCOR 1221)
4.9U 4,4'-DDE (P,P'-DDE)	49U PCB-1232 (AROCOR 1232)
4.9U ENDRIK	49U PCB-1242 (AROCOR 1242)
4.9U ENDOSULFAN II (BETA)	49U PCB-1248 (AROCOR 1248)
4.9U 4,4'-DDD (P,P'-DDD)	49U PCB-1254 (AROCOR 1254)
4.9U ENDOSULFAN SULFATE	49U PCB-1260 (AROCOR 1260)
4.9U 4,4'-DDT (P,P'-DDT)	34 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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*** PROJECT NO. 92-0331 *** SAMPLE NO. 65465 *** SAMPLE TYPE: SOIL ***
*** SOURCE: SIMMONS CASKET CO ***
*** STATION ID: SD-03 ***
*** CASE NUMBER: 17847 ***
*** SAS NUMBER: ***
*** PROG ELEM: NSF *** COLLECTED BY: B STAFFORD ***
*** CITY: LANCASTER *** ST: KY ***
*** COLLECTION START: 02/26/92 1340 *** STOP: 00/00/00 ***
*** D. NUMBER: CL59 ***
*** ANALYTICAL RESULTS ***

ANALYTICAL RESULTS		ANALYTICAL RESULTS	
UG/KG		UG/KG	
2.0U	ALPHA-BHC	20U	METHOXYCHLOR
2.0U	BETA-BHC	4.1U	ENDRIN KETONE
2.0U	DELTA-BHC	4.1U	ENDRIN ALDEHYDE
2.0U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
2.0U	HEPTACHLOR	2.0U	GAMMA-CHLORDANE /2
2.0U	ALDRIN	200U	TOXAPHENE
2.0U	HEPTACHLOR EPOXIDE	41U	PCB-1016 (AROCOR 1016)
2.0U	ENDOSULFAN I (ALPHA)	82U	PCB-1221 (AROCOR 1221)
4.1U	DIELDRIN	41U	PCB-1232 (AROCOR 1232)
4.1U	4,4'-DDE (P,P'-DDE)	41U	PCB-1242 (AROCOR 1242)
4.1U	ENDRIN	41U	PCB-1248 (AROCOR 1248)
4.1U	ENDOSULFAN II (BETA)	41U	PCB-1254 (AROCOR 1254)
4.1U	4,4'-DDD (P,P'-DDD)	41U	PCB-1260 (AROCOR 1260)
4.1U	ENDOSULFAN SULFATE	22	PERCENT MOISTURE
4.1U	4,4'-DDT (P,P'-DDT)		

REMARKS
REMARKS
FOOTNOTES
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*C-CONFIRMED BY GCMS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 *** SAMPLE NO. 65466 *** SAMPLE TYPE: SOIL ***
 *** SOURCE: SIMMONS CASKET CO ***
 *** STATION ID: SD-04 ***
 *** CASE NUMBER: 17847 *** SAS NUMBER: ***
 *** PROG. ELEM: NSF *** COLLECTED BY: B STAFFORD ***
 *** CITY: LANCASTER ***
 *** COLLECTION START: 02/26/92 ***
 *** D. NUMBER: CL60 ***
 *** STOP: 00/00/00 ***

UG/KG *** ANALYTICAL RESULTS *** UG/KG *** ANALYTICAL RESULTS ***

2.7U	ALPHA-BHC	27U	METHOXYCHLOR
2.7U	BETA-BHC	5.5U	ENDRIN KETONE
2.7U	DELTA-BHC	5.5U	ENDRIN ALDEHYDE
2.7U	GAMMA-BHC (LINDANE)	2.7U	CHLORDANE (TECH. MIXTURE) /1
2.7U	HEPTACHLOR	2.7U	GAMMA-CHLORDANE /2
2.7U	ALDRIN	270U	ALPHA-CHLORDANE
2.7U	HEPTACHLOR EPOXIDE	55U	TOXAPHENE
2.7U	ENDOSULFAN I (ALPHA)	55U	PCB-1016 (AROCOR 1016)
5.5U	DIELDRIN	110U	PCB-1221 (AROCOR 1221)
5.5U	4,4'-DDE (P,P'-DDE)	55U	PCB-1232 (AROCOR 1232)
5.5U	ENDRIN	55U	PCB-1242 (AROCOR 1242)
5.5U	ENDOSULFAN II (BETA)	55U	PCB-1248 (AROCOR 1248)
5.5U	4,4'-DDD (P,P'-DDD)	55U	PCB-1254 (AROCOR 1254)
5.5U	ENDOSULFAN SULFATE	55U	PCB-1260 (AROCOR 1260)
5.5U	4,4'-DDT (P,P'-DDT)	40	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** ** ** ** **
** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: D. NUMBER: CL61 **
** ** ** **

UG/KG ANALYTICAL RESULTS

120U ALPHA-BHC
120U BETA-BHC
120U DELTA-BHC
120U GAMMA-BHC (LINDANE)
120U HEPTACHLOR
120UJ ALDRIN
120U HEPTACHLOR EPOXIDE
120U ENDOSULFAN I (ALPHA)
240U DIELDRIN
240U 4,4'-DDE (P,P'-DDE)
240U ENDRIN
240U ENDOSULFAN II (BETA)
240U 4,4'-DDD (P,P'-DDD)
240U ENDOSULFAN SULFATE
240U 4,4'-DDT (P,P'-DDT)

UG/KG ANALYTICAL RESULTS

1200U METHOXYCHLOR
240U ENDRIN KETONE
240U ENDRIN ALDEHYDE
-- CHLORDANE (TECH. MIXTURE) /1
120U GAMMA-CHLORDANE /2
120U ALPHA-CHLORDANE /2
12000U TOXAPHENE
2400U PCB-1016 (AROCLOR 1016)
4800U PCB-1221 (AROCLOR 1221)
2400U PCB-1232 (AROCLOR 1232)
2400U PCB-1242 (AROCLOR 1242)
2400U PCB-1248 (AROCLOR 1248)
2400U PCB-1254 (AROCLOR 1254)
2400U PCB-1260 (AROCLOR 1260)
32 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL
 *** SOURCE: SIMMONS CASKET CO
 *** STATION ID: 55-03
 *** CASE NUMBER: 17847
 *** SAS NUMBER: 17847
 *** PROG ELEM: NSF COLLECTED BY: B STAFFORD
 *** CITY: LANCASTER ST: KY
 *** COLLECTION START: 02/26/92 1630 STOP: 00/00/00
 *** D. NUMBER: CL62

UG/KG ANALYTICAL RESULTS

2.2U ALPHA-BHC
 2.2U BETA-BHC
 2.2U DELTA-BHC
 2.2U GAMMA-BHC (LINDANE)
 2.2U HEPTACHLOR
 2.2U ALDRIN
 2.2U HEPTACHLOR EPOXIDE
 2.2U ENDOSULFAN I (ALPHA)
 4.4U DIELDRIN
 4.4U 4,4'-DDE (P,P'-DDE)
 4.4U ENDRIN
 4.4U ENDOSULFAN II (BETA)
 4.4U 4,4'-DDD (P,P'-DDD)
 4.4U ENDOSULFAN SULFATE
 4.4U 4,4'-DDT (P,P'-DDT)

UG/KG

22U METHOXYCHLOR
 4.4U ENDRIN KETONE
 4.4U ENDRIN ALDEHYDE
 --- CHLORDANE (TECH. MIXTURE) /1
 2.2U GAMMA-CHLORDANE /2
 2.2U ALPHA-CHLORDANE /2
 220U TOXAPHENE
 44U PCB-1016 (AROCOR 1016)
 88U PCB-1221 (AROCOR 1221)
 44U PCB-1232 (AROCOR 1232)
 44U PCB-1242 (AROCOR 1242)
 44U PCB-1248 (AROCOR 1248)
 44U PCB-1254 (AROCOR 1254)
 80 PCB-1260 (AROCOR 1260)
 25 PERCENT MOISTURE

ANALYTICAL RESULTS

REMARKS

REMARKS

FOOTNOTES

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 *C-CONFIRMED BY GCMS
 *NA-NOT ANALYZED
 *NAI-INTERFERENCES
 *J-ESTIMATED VALUE
 *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL ***
 *** SOURCE: SIMMONS CASKET CO ***
 *** STATION ID: 55-04 ***
 *** CASE NUMBER: 17847 ***
 *** SAS NUMBER: ***

UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS

2.4U	ALPHA-BHC	24U	METHOXYCHLOR
2.4U	BETA-BHC	4.7U	ENDRIN KETONE
2.4U	DELTA-BHC	4.7U	ENDRIN ALDEHYDE
2.4U	GAMMA-BHC (LINDANE)	2.4U	CHLORDANE (TECH. MIXTURE) /1
2.4U	HEPTACHLOR	2.4U	GAMMA-CHLORDANE /2
2.4U	ALDRIN	24U	ALPHA-CHLORDANE
2.4U	HEPTACHLOR EPOXIDE	47U	TOXAPHENE
2.4U	ENDOSULFAN I (ALPHA)	47U	PCB-1016 (AROCOR 1016)
4.7U	DIELDRIN	94U	PCB-1221 (AROCOR 1221)
4.7U	4,4'-DDE (P,P'-DDE)	47U	PCB-1232 (AROCOR 1232)
4.7U	ENDRIN	47U	PCB-1242 (AROCOR 1242)
4.7U	ENDOSULFAN II (BETA)	47U	PCB-1248 (AROCOR 1248)
4.7U	4,4'-DDD (P,P'-DDD)	47U	PCB-1254 (AROCOR 1254)
4.7U	ENDOSULFAN SULFATE	47U	PCB-1260 (AROCOR 1260)
4.7U	4,4'-DDT (P,P'-DDT)	31	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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 *R-OC INDICATES THAT DATA UNUSABLE. 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
 *C-CONFIRMED BY GCMS

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT
 PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL
 SOURCE: SIMMONS CASKET CO
 STATION ID: SS-05
 CASE NUMBER: 17847 SAS NUMBER:
 PROG ELEM: NSF COLLECTED BY: B STAFFORD
 CITY: LANCASTER ST: KY
 COLLECTION START: 02/26/92 1755 STOP: 00/00/00
 D. NUMBER: CL64

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2.1U ALPHA-BHC		21U METHOXYCHLOR	
2.1U BETA-BHC		4.3U ENDRIN KETONE	
2.1U DELTA-BHC		4.3U ENDRIN ALDEHYDE	
2.1U GAMMA-BHC (LINDANE)		2.1U CHLORDANE (TECH MIXTURE) /1	
2.1U HEPTACHLOR		2.1U GAMMA-CHLORDANE //2	
2.1U ALDRIN		210U ALPHA-CHLORDANE /2	
2.1U HEPTACHLOR EPOXIDE		43U TOXAPHENE	
2.1U ENDOSULFAN I (ALPHA)		PCB-1016 (AROCCLOR 1016)	
4.3U DIELDRIN		85U PCB-1221 (AROCCLOR 1221)	
4.3U 4,4'-DDE (P,P'-DDE)		43U PCB-1232 (AROCCLOR 1232)	
4.3U ENDRIN		43U PCB-1242 (AROCCLOR 1242)	
4.3U ENDOSULFAN II (BETA)		43U PCB-1248 (AROCCLOR 1248)	
4.3U 4,4'-DDD (P,P'-DDD)		43U PCB-1254 (AROCCLOR 1254)	
4.3U ENDOSULFAN SULFATE		43U PCB-1260 (AROCCLOR 1260)	
4.3U 4,4'-DDT (P,P'-DDT)		22 PERCENT MOISTURE	

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

04/13/92

PESTICIDES/PCB'S DATA REPORT

*** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL
*** SOURCE: SIMMONS CASKET CO
*** STATION ID: SS-06
*** CASE NUMBER: 17847 SAS NUMBER:

*** PROG ELEM: NSF COLLECTED BY: B STAFFORD
*** CITY: LANCASTER ST: KY
*** COLLECTION START: 02/26/92 1820 STOP: 00/00/00
*** D. NUMBER: CL65

UG/KG ANALYTICAL RESULTS

UG/KG ANALYTICAL RESULTS

1.80	ALPHA-BHC	180	METHOXYCHLOR
1.80	BETA-BHC	3.70	ENDRIN KETONE
1.80	DELTA-BHC	3.70	ENDRIN ALDEHYDE
1.80	GAMMA-BHC (LINDANE)	1.80	CHLORDANE (TECH. MIXTURE) /1
1.80	HEPTACHLOR	1.80	GAMMA-CHLORDANE /2
1.80	ALDRIN	180	TOXAPHENE
1.80	HEPTACHLOR EPOXIDE	370	PCB-1016 (AROCOR 1016)
1.80	ENDOSULFAN I (ALPHA)	740	PCB-1221 (AROCOR 1221)
3.70	DIELDRIN	370	PCB-1232 (AROCOR 1232)
3.70	4,4'-DDE (P,P'-DDE)	370	PCB-1242 (AROCOR 1242)
3.70	ENDRIN	370	PCB-1248 (AROCOR 1248)
3.70	ENDOSULFAN II (BETA)	370	PCB-1254 (AROCOR 1254)
3.70	4,4'-DDD (P,P'-DDD)	370	PCB-1260 (AROCOR 1260)
3.70	ENDOSULFAN SULFATE	12	PERCENT MOISTURE
3.70	4,4'-DDT (P,P'-DDT)		

REMARKS

REMARKS

FOOTNOTES

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MEMORANDUM

OF CALL

Previous editions usable

TO:

~~FD 050074889~~
Lofted

YOU WERE CALLED BY-



YOU WERE VISITED BY-

OF (Organization)

CHARLIE HOOPER



PLEASE PHONE ▶



FTS



AUTOVON

250-3286



WILL CALL AGAIN



IS WAITING TO SEE YOU



RETURNED YOUR CALL



WISHES AN APPOINTMENT

MESSAGE

The field contractors were not
at fault. The problem was
within the laboratory.

RECEIVED BY

DATE

TIME

4/27

10:58

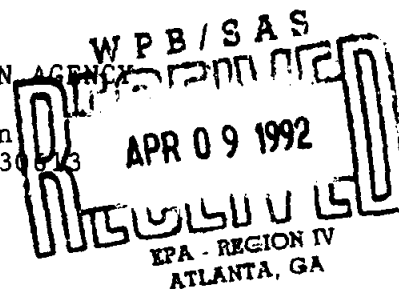
63-110 NSN 7540-00-634-4018

STANDARD FORM 63 (Rev. 8-81)

* U.S. GPO: 1990 - 262-080

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FPMR (41 CFR) 101-11.6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613



*****MEMORANDUM*****

DATE: 04/03/92

SUBJECT: Results of Metals Analysis;
92-0331 SIMMONS CASKET CO
LANCASTER KY
CASE NO: 17847

KYD050074889

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMAN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

CC:

INORGANIC DATA QUALIFIERS REPORT

Case Number: 17847

Project Number: 92-0331

Site: Simmons Casket Co., Lancaster, KY

Element	Flag	Samples Affected	Reason
Al, Cd, Cr, Fe Mn, V, Zn	U	All positives > IDL, but < CRDL	Baseline Instability
Ba	U	All positives > IDL, but < 10X contaminant level	Positives in blanks
Sb	J	All positives All negatives	Matrix spike recovery = 26.5%
Cd	J	All	Matrix spike recovery = 60.9%
Cu	J	All positives	Matrix spike recovery = 669.1%
Se	J	All	Matrix spike recovery = 63.9%
Ag	J	All	Matrix spike recovery = 58.7%
Zn	J	All	Matrix spike recovery = 59.5%
Ca	J	All	Matrix duplicate RPD = 62.5%
Pb	J	All	Matrix duplicate RPD = 43.3%
Mg	J	All	Matrix duplicate RPD = 36.4%
Mn	J	All	Matrix duplicate RPD = 42.2%
Pb	J	MDCL62 and MDCL63	Duplicate MSA r < .995
Cd	J	MDCL61	% RSD > 20% for ICP multiple exposures
Be	J	MDCL63	% RSD > 20% for ICP multiple exposures

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65462 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-01 COLLECTION START: 02/26/92 0940 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL56 **
**

MG/KG ANALYTICAL RESULTS		MG/KG ANALYTICAL RESULTS	
16000	ALUMINUM	1400J	MANGANESE
8.4UR	ANTIMONY	0.13U	MERCURY
11	ARSENIC	16	NICKEL
220	BARIUM	940	POTASSIUM
1.5	BERYLLIUM	5.3UJ	SELENIUM
2UJ	CADMIUM	1.4UJ	SILVER
20000J	CALCIUM	58	SODIUM
26	CHROMIUM	0.53U	THALLIUM
19	COBALT	NA	TIN
14J	COPPER	33	VANADIUM
43000	IRON	53J	ZINC
55J	LEAD	29	PERCENT MOISTURE
6800J	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-01 COLLECTION START: 02/26/92 1130 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL57 **
** **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
12000	ALUMINUM	1400J	MANGANESE
10UR	ANTIMONY	0.14U	MERCURY
9.6	ARSENIC	13	NICKEL
79	BARIUM	850	POTASSIUM
1.1	BERYLLIUM	1.30J	SELENIUM
10J	CADMIUM	1.60J	SILVER
18000J	CALCIUM	44	SODIUM
20	CHROMIUM	0.67U	THALLIUM
18	COBALT	NA	TIN
16J	COPPER	28	VANADIUM
30000	IRON	55J	ZINC
38J	LEAD	42	PERCENT MOISTURE
5500J	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-02 COLLECTION START: 02/26/92 1300 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL58 **
**

MG/KG ANALYTICAL RESULTS		MG/KG ANALYTICAL RESULTS	
13000	ALUMINUM	1700J	MANGANESE
8.8UR	ANTIMONY	0.14U	MERCURY
8.7	ARSENIC	12	NICKEL
120	BARIUM	1000	POTASSIUM
1.1	BERYLLIUM	1.2UJ	SELENIUM
2UJ	CADMIUM	1.4UJ	SILVER
5500J	CALCIUM	54	SODIUM
25	CHROMIUM	0.60U	THALLIUM
20	COBALT	NA	TIN
11J	COPPER	29	VANADIUM
29000	IRON	42J	ZINC
37J	LEAD	34	PERCENT MOISTURE
2500J	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-03 COLLECTION START: 02/26/92 1340 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL59 **
**

MG/KG
12000 ALUMINUM
7.2UR ANTIMONY
10 ARSENIC
96 BARIUM
1.1 BERYLLIUM
11J CADMIUM
14000J CALCIUM
34 CHROMIUM
28 COBALT
95J COPPER
42000 IRON
61J LEAD
4500J MAGNESIUM

ANALYTICAL RESULTS

MG/KG
2300J MANGANESE
0.11U MERCURY
13 NICKEL
590 POTASSIUM
0.94UJ SELENIUM
1.2UJ SILVER
43 SODIUM
0.47U THALLIUM
NA TIN
46 VANADIUM
370J ZINC
17 PERCENT MOISTURE

ANALYTICAL RESULTS

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-04 COLLECTION START: 02/26/92 1450 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL60 **
*** **

MG/KG ANALYTICAL RESULTS

14000 ALUMINUM
10UR ANTIMONY
8.5 ARSENIC
70 BARIUM
1.2 BERYLLIUM
2UJ CADMIUM
8600J CALCIUM
17 CHROMIUM
18 COBALT
14J COPPER
32000 IRON
31J LEAD
3600J MAGNESIUM

MG/KG ANALYTICAL RESULTS

1100J MANGANESE
0.15U MERCURY
17 NICKEL
1100 POTASSIUM
1.3UJ SELENIUM
1.6UJ SILVER
66 SODIUM
0.63U THALLIUM
NA TIN
23 VANADIUM
47J ZINC
40 PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL61 **
*** **

MG/KG
19000 ALUMINUM
8.7UR ANTIMONY
35 ARSENIC
170 BARIUM
2.2 BERYLLIUM
1.5J CADMIUM
12000J CALCIUM
24 CHROMIUM
13 COBALT
150J COPPER
39000 IRON
160J LEAD
3900J MAGNESIUM

ANALYTICAL RESULTS

MG/KG
690J MANGANESE
0.12U MERCURY
29 NICKEL
2700 POTASSIUM
1.1UJ SELENIUM
1.4UJ SILVER
380 SODIUM
0.55U THALLIUM
NA TIN
23 VANADIUM
290J ZINC
30 PERCENT MOISTURE

ANALYTICAL RESULTS

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-03 COLLECTION START: 02/26/92 1630 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL62 **
**

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
22000	ALUMINUM	1700J	MANGANESE
7.6UR	ANTIMONY	0.13U	MERCURY
20	ARSENIC	18	NICKEL
160	BARIUM	1500	POTASSIUM
1.1	BERYLLIUM	4.9UJ	SELENIUM
20J	CADMIUM	1.2UJ	SILVER
11000J	CALCIUM	480	SODIUM
19	CHROMIUM	0.49U	THALLIUM
14	COBALT	NA	TIN
16J	COPPER	31	VANADIUM
49000	IRON	73J	ZINC
27J	LEAD	25	PERCENT MOISTURE
3700J	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-04 COLLECTION START: 02/26/92 1705 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL63 **
**

*** **
MG/KG ANALYTICAL RESULTS
6800 ALUMINUM
7.8UR ANTIMONY
6.6 ARSENIC
100 BARIUM
0.55J BERYLLIUM
20J CADMIUM
150000J CALCIUM
20 CHROMIUM
7.2 COBALT
100J COPPER
15000 IRON
54J LEAD
27000J MAGNESIUM

*** **
MG/KG ANALYTICAL RESULTS
480J MANGANESE
0.11U MERCURY
11 NICKEL
1100 POTASSIUM
4.70J SELENIUM
1.30J SILVER
400 SODIUM
0.47U THALLIUM
NA TIN
20U VANADIUM
110J ZINC
21 PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-05 COLLECTION START: 02/26/92 1755 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL64 **
**

MG/KG ANALYTICAL RESULTS
10000 ALUMINUM
7.6UR ANTIMONY
6.1 ARSENIC
61 BARIUM
0.82 BERYLLIUM
1UJ CADMIUM
96000J CALCIUM
13 CHROMIUM
10 COBALT
35J COPPER
20000 IRON
26J LEAD
14000J MAGNESIUM

MG/KG ANALYTICAL RESULTS
730J MANGANESE
0.13U MERCURY
11 NICKEL
900 POTASSIUM
0.98UJ SELENIUM
1.2UJ SILVER
120 SODIUM
0.49U THALLIUM
NA TIN
17 VANADIUM
45J ZINC
23 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65471 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL65 **
**

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
11000	ALUMINUM	1600J	MANGANESE
7.4UR	ANTIMONY	0.11U	MERCURY
6.6	ARSENIC	12	NICKEL
64	BARIUM	740	POTASSIUM
0.92	BERYLLIUM	4.9UJ	SELENIUM
2UJ	CADMIUM	1.2UJ	SILVER
29000J	CALCIUM	70	SODIUM
16	CHROMIUM	0.49U	THALLIUM
18	COBALT	NA	TIN
28J	COPPER	23	VANADIUM
23000	IRON	36J	ZINC
43J	LEAD	21	PERCENT MOISTURE
9800J	MAGNESIUM		

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

METALS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65472 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-07 COLLECTION START: 02/27/92 1900 STOP: 00/00/00 **
** CASE NUMBER: 17847 SAS NUMBER: MD NUMBER: CL54 **
**

MG/KG ANALYTICAL RESULTS		MG/KG ANALYTICAL RESULTS	
270	ALUMINUM	0.57	MANGANESE
6.4U	ANTIMONY	0.11U	MERCURY
0.79	ARSENIC	0.83U	NICKEL
0.56	BARIUM	20	POTASSIUM
0.21U	BERYLLIUM	0.85U	SELENIUM
0.21U	CADMIUM	1U	SILVER
19U	CALCIUM	58	SODIUM
1.1	CHROMIUM	0.43U	THALLIUM
0.62U	COBALT	NA	TIN
0.72	COPPER	0.94	VANADIUM
250	IRON	4.4	ZINC
0.73	LEAD	10	PERCENT MOISTURE
20U	MAGNESIUM		

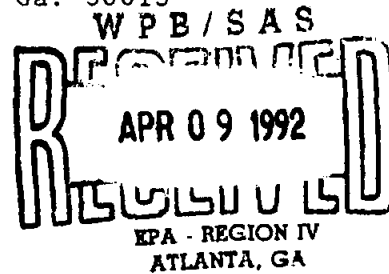
REMARKS

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613



*****MEMORANDUM*****

DATE: 04/03/92

SUBJECT: Results of Specified Analysis;
92-0331 SIMMONS CASKET CO
LANCASTER KY
CASE NO: 17847

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMEN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

CC:

INORGANIC DATA QUALIFIERS REPORT

Case Number: 17847

Project Number: 92-0331

Site: Simmons Casket Co., Lancaster, KY

Element	Flag	Samples Affected	Reason
Al, Cd, Cr, Fe Mn, V, Zn	U	All positives > IDL, but < CRDL	Baseline Instability
Ba	U	All positives > IDL, but < 10X contaminant level	Positives in blanks
Sb	J	All positives All negatives	Matrix spike recovery - 26.5%
Cd	J	All	Matrix spike recovery - 60.9%
Cu	J	All positives	Matrix spike recovery - 669.1%
Se	J	All	Matrix spike recovery - 63.9%
Ag	J	All	Matrix spike recovery - 58.7%
Zn	J	All	Matrix spike recovery - 59.5%
Ca	J	All	Matrix duplicate RPD - 62.5%
Pb	J	All	Matrix duplicate RPD - 43.3%
Mg	J	All	Matrix duplicate RPD - 36.4%
Mn	J	All	Matrix duplicate RPD - 42.2%
Pb	J	MDCL62 and MDCL63	Duplicate MSA r < .995
Cd	J	MDCL61	% RSD > 20% for ICP multiple exposures
Be	J	MDCL63	% RSD > 20% for ICP multiple exposures

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65462 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-01 COLLECTION START: 02/26/92 0940 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL56 MD NO: CL56 **
**
*** **
```

RESULTS UNITS PARAMETER
6.9U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65463 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-01 COLLECTION START: 02/26/92 1130 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL57 MD NO: CL57 **
** ***
```

RESULTS UNITS PARAMETER
8.5U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65464 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-02 COLLECTION START: 02/26/92 1300 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL58 MD NO: CL58 **
** **

RESULTS UNITS PARAMETER
7.5U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
*** ** ** ** **
** PROJECT NO. 92-0331 SAMPLE NO. 65465 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-03 COLLECTION START: 02/26/92 1340 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL59 MD NO: CL59 **
** ** ** **
```

RESULTS UNITS PARAMETER
5.9U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
*** ** ** ** **
** PROJECT NO. 92-0331 SAMPLE NO. 65466 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SD-04 COLLECTION START: 02/26/92 1450 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL60 MD NO: CL60 **
** ** ** **
```

RESULTS UNITS PARAMETER
8.1U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** ** ** ** **
** PROJECT NO. 92-0331 SAMPLE NO. 65467 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-02 COLLECTION START: 02/26/92 1525 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL61 MD NO: CL61 **
** ** ** **

RESULTS UNITS PARAMETER
6.9U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65468 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-03 COLLECTION START: 02/26/92 1630 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL62 MD NO: CL62 **
** **

RESULTS UNITS PARAMETER
6.4U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65469 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-04 COLLECTION START: 02/26/92 1705 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL63 MD NO: CL63 **
** **

RESULTS UNITS PARAMETER
6.1U MG/KG CYANIDE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
*** **
** PROJECT NO. 92-0331 SAMPLE NO. 65470 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: B STAFFORD **
** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-05 COLLECTION START: 02/26/92 1755 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL64 MD NO: CL64 **
** ***
```

RESULTS UNITS PARAMETER
6.3U MG/KG CYANIDE

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

SPECIFIED ANALYSIS DATA REPORT

```
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** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-06 COLLECTION START: 02/26/92 1820 STOP: 00/00/00 **
** CASE.NO.: 17847 SAS NO.: D. NO.: CL65 MD NO: CL65 **
** ***
```

RESULTS UNITS PARAMETER
6.1U MG/KG CYANIDE

FOOTNOTES

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

04/02/92

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** SOURCE: SIMMONS CASKET CO CITY: LANCASTER ST: KY **
** STATION ID: SS-07 COLLECTION START: 02/27/92 1900 STOP: 00/00/00 **
** CASE NO.: 17847 SAS NO.: D. NO.: CL54 MD NO: CL54 **
** **

RESULTS UNITS PARAMETER
5.5U MG/KG CYANIDE

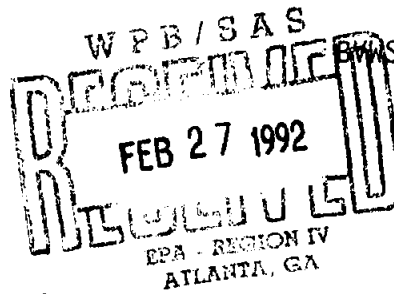
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B & V WASTE SCIENCE & TECHNOLOGY CORP.

1117 PERIMETER CENTER WEST
SUITE W-212
ATLANTA, GEORGIA 30338
TEL (404) 392-9227
FAX: (404) 392-9289

USEPA
Simmons Casket Company
W.A. No. 11



BVST Project 52011.020
BVST File C.3
February 27, 1992

Mr. Al Hanke
Chief, Site Assessment
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Subject: Field Study Plan -Simmons Casket

Dear Mr. Hanke:

Please find attached the Field Study Plan for the Simmons Casket Co., in Lancaster, Kentucky (EPA ID NO. KYD050074889). This plan incorporates all comments provided by Loftin Carr of the Site Assessment section. It is our policy not to proceed with field activities without an approved study plan. We have taken actions to prevent this from occurring again. If you have any further questions concerning this plan or other issues, please give me a call.

Sincerely,

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

Hubert Wieland
Project Manager

Enclosures

cc: Charles Swan, EPA PO
Keith Mills, EPA Contracting Specialist
Loftin Carr, EPA SAM

**FIELD STUDY PLAN
SITE INSPECTION
Simmons Casket Company
Lancaster, Garrard County, Kentucky**

EPA ID NO. KYD050074889

Prepared Under

CONTRACT NO.68-W9-0055

**FOR THE
WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY**

February 27, 1992

Prepared by

Carter J. Helm

B&V WASTE SCIENCE AND TECHNOLOGY CORP

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FIELD STUDY PLAN

SITE INSPECTION

Simmons Casket Company

Lancaster, Garrard County, Kentucky

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STUDY PLAN
SITE INSPECTION
Simmons Casket Company
Lancaster, Garrard County, Kentucky
EPA ID No. KYD050074889
wastelan N°05160

1.0 INTRODUCTION

B & V Waste Science & Technology has been tasked by the U. S. Environmental Protection Agency (EPA), to conduct a Site Inspection (SI) at the Simmons Casket Company in Garrard County, Kentucky. The inspection will be performed under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA).

1.1 Objectives

The objectives of this site inspection will be to determine the nature of contaminants present at the site and to determine if a release of these substances has occurred or may occur. Further, this inspection will seek to determine the possible pathways by which contamination could migrate from the site and the populations and environments it would potentially affect. Through these objectives, a recommendation will be made regarding future activities at the site.

Specific elements are:

- Obtain information to prepare a site-specific preliminary Hazard Ranking Score (HRS)
- Provide EPA the necessary information to make decisions on any other actions warranted at the site.

1.2 Scope of Work

The scope of this investigation will include the following activities:

- Obtain and review background materials relevant to HRS scoring of site
- Obtain aerial photographs and maps of site, if possible
- Obtain information on local water systems
- Evaluate target populations associated with the groundwater, surface water, air and onsite exposure pathways
- Determine location and distance to nearest potable well
- Develop a site sketch
- Collect environmental samples

1.3 Schedule

Field work for the Simmons Casket Company is scheduled for the week of February 24, 1992.

1.4 Personnel

Site Manager: Carter J. Helm

Site Safety Coordinator: Bill Stafford

Sampling Officer: Kevin Brown

1.5 Permits and Authorization Requirements

EPA is responsible for obtaining access to the site, permission to take photographs of site, and permission to return investigation derived wastes to the property. In addition, EPA is responsible for all permits which may be required to accomplish this task.

1.6 Site History and Description

The Simmons Casket Company, 163 Industry Road, is located 0.7 miles south of Lancaster, Kentucky in Garrard County. The geographic coordinates are 37° 36' 21" N. latitude and 84° 34' 35" W. longitude (Ref. 1). The site location is shown on Figure 1. Wooden and metal (steel, copper, and bronze) caskets were produced at the facility from 1965 to 1984. From 1965 to 1980, National Casket Company operated

the facility; from 1980 to late 1982, Simmons Casket Company produced caskets; and from 1982 to 1985, York Casket Company was the manufacturer (Ref. 2). The manufacturing process consisted of welding, washing, painting, stripping, and varnishing the caskets (Ref. 2). Wastes produced during the years of operation include: Toluene, phenols, paint thinner, and 1,1,1-trichloroethane (Ref. 3). Hazardous wastes generated at the facility were placed in drums and kept onsite until a hazardous waste transporter removed them (Ref. 2). The site layout is shown on Figure 2.

In 1984 operations ceased; however, several full drums remained on site. In 1987 the facility was sold to Allison Abrasives, Incorporated, who renovated the facility and removed underground storage tanks. In October, 1987, Allison Abrasives began production of abrasive wheels (Ref. 2). Drums are no longer stored outside of the plant.

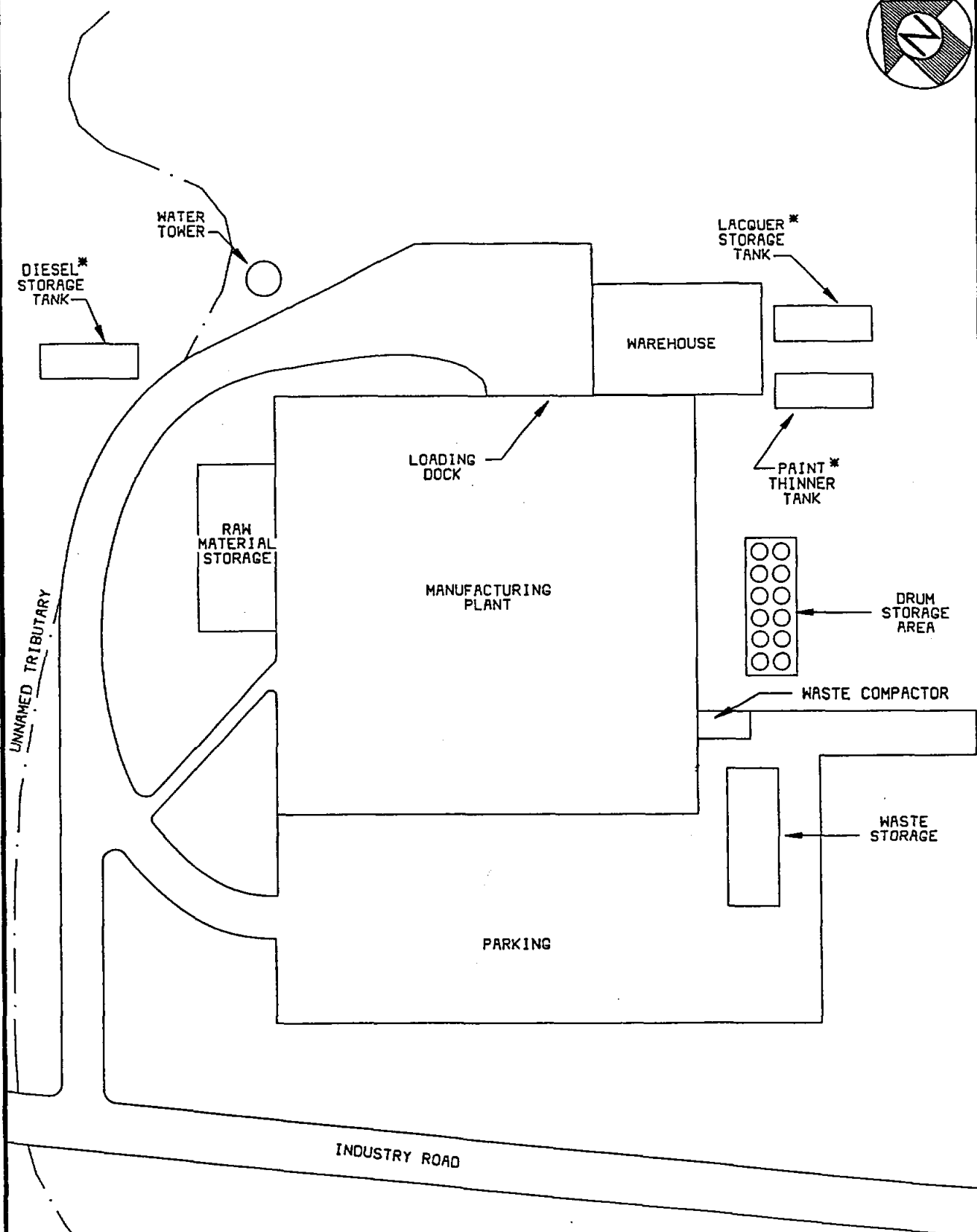
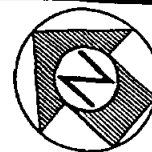
On October 27, 1989, the Kentucky Department of Waste Management conducted a preliminary assessment site visit. Unidentified drums were discovered on the east side of the plant, as well as stained soil and stressed vegetation (Ref. 2).

1.7 Hydrogeology

The Simmons Casket Company is located in the Interior Low Plateaus physiographic province and the nonglaciated central groundwater region (Refs. 5, plate 28; 6, p. 223, 25, 26). The region is characterized by thin regolith over sedimentary rock with area topography between 800 to 1100 feet above mean sea level (amsl); whereas, the facility lies at 1000 feet amsl (Refs. 1, 7, pp. 229-30). The mean annual precipitation is 48 inches, and the mean annual lake pan evaporation is 35 inches, resulting in a net annual rainfall of 13 inches (Ref. 8, pp. 43, 63). The 2-year, 24-hour rainfall is 3.0 inches (Ref. 9, p. 95).

The soil beneath the Simmons Casket Company is classified as the Lowell series Nicholson silt loam (Refs. 2, 10). This soil type is characterized by: 2 percent to 6 percent slopes, 2-3 feet depth, good tilth, high erodibility, and high acidity (Ref. 10).

Beneath the soil lies the New Albany Shale of Devonian and Mississippian age characterized as black shale with fine-grained quartz and pyrite (Ref. 11, pp. 24-25).



* TANKS REMOVED IN 1987

NOT TO SCALE



SITE LAYOUT MAP
SIMMONS CASKET COUNTY
LANCASTER, GARRARD COUNTY, KENTUCKY

FIGURE
2

Underlying the New Albany Shale is the Boyle Dolomite which consists of dolomite and dolomitic limestone (Refs. 2; 11, p. 21-25). The combined thicknesses of these formations is approximately 190 to 240 feet thick (Ref. 11, P. 24).

Most wells in the area do not produce enough water for domestic supply and wells deeper than 100 feet tend to produce groundwater that is not suitable for potable use due to high salinity and high concentrations of hydrogen sulfide (Ref. 2).

2.0 Sampling Investigation

The sampling investigation will include the collection of surface and subsurface soil samples, sediment samples, and groundwater samples. All samples collected will be analyzed for extractable and purgeable organic compounds, pesticides, PCB, cyanides, and metals. Analyses will be performed under the Contract Laboratory Program (CLP).

2.1 Surface Soil Sampling

Five surface soil samples will be collected during the sampling inspection; one as a background in the northeast corner of the site, four others from various positions around the Simmons Casket Company. These last four samples will be collected to determine the absence or presence of contaminants. Sample codes and descriptions are listed on Table 1 and shown on Figure 3.

2.2 Subsurface Soil Sampling

Four subsurface soil samples will be collected at the Simmons Casket Company; one as a background, in the northeast corner of the facility, and three onsite to determine the absence or presence of contaminants. Sample codes and descriptions are listed on Table 1 and shown on Figure 3.

2.3 Groundwater Sampling

Groundwater will be collected from four temporary monitoring wells located onsite, one of which will serve as the background. The temporary wells will be emplaced during the investigation. Sample codes and descriptions may be found in Table 1 and are shown on Figure 3. Use of private wells in the area is extremely limited. Most

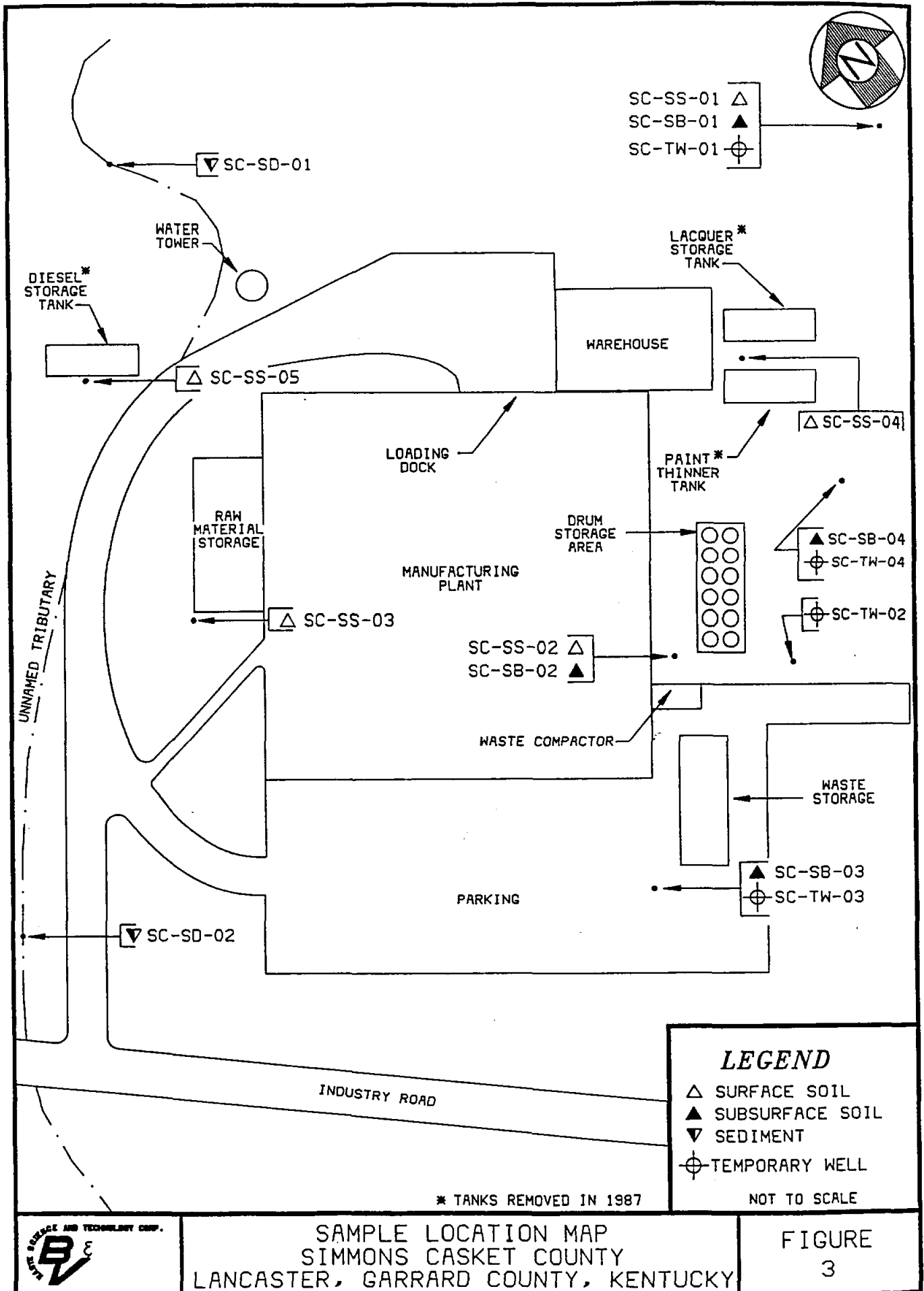


TABLE 1
SAMPLE LOCATIONS AND RATIONALE
Simmons Casket Company
Lancaster, Garrard County, Kentucky

Sample Code	Sample Type	Location	Rationale
SC-SS-01	Surface Soil	southeast corner of property	to establish background levels
SC-SS-02	Surface Soil	drum storage area, south of plant	to determine the absence or presence of contaminants
SC-SS-03	Surface Soil	near drainage area of raw material storage	to determine the absence or presence of contaminants
SC-SS-04	Surface Soil	at previous location of underground storage tanks	to determine the absence or presence of contaminants
SC-SS-05	Surface Soil	at previous location of underground storage tanks	to determine the absence or presence of contaminants
SC-SB-01	Subsurface Soil	southeast corner of property	to establish background levels
SC-SB-02	Subsurface Soil	drum storage area, south of plant	to determine the absence or presence of contaminants
SC-SB-03	Subsurface Soil	near waste storage area	to determine the absence or presence of contaminants
SC-SB-04	Subsurface Soil	at previous location of underground storage tanks	to determine the absence or presence of contaminants
SC-TW-01	Temporary Well Groundwater	southeast corner of property	to establish background levels
SC-TW-02	Temporary Well Groundwater	drum storage area, south of plant	to determine the absence or presence of contaminants
SC-TW-03	Temporary Well Groundwater	near waste storage area	to determine the absence or presence of contaminants
SC-TW-04	Temporary Well Groundwater	downgradient of raw material storage area	to determine the absence or presence of contaminants
SC-SD-01	Sediment Sample	upstream of unnamed tributary	to establish background levels
SC-SD-02	Sediment Sample	downstream of unnamed tributary past manufacturing plant	to determine the absence or presence of contaminants

people use the municipal system or a cistern. However, if private wells exist near the facility, they will be sampled.

2.4 Sediment Sampling

A total of two sediment samples will be taken from the unnamed tributary, running through the western portion of the site property, flowing south. A background sample will be collected north of the site, while an indicator sample will be collected south of the plant.

2.5 Analytical and Container Requirements

Sample containers used will be in accordance with the requirements specified in the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, February 1, 1991. The following is a description of the analysis and types of containers required.

<u>Analyses</u>	<u>Container</u>	<u>Preservatives</u> **
Extractable Organics, Water	1 gal., amber glass *	None
Volatile Organics, Water	3-40 ml., glass vial *	4 drops conc. HCL to pH <2 :
Metals, Water	1 liter, plastic	50% HNO ₃ to pH <2
Cyanide, Water	1 liter, plastic	NaOH to pH >12
Extractable Organics Soil/Sediment	8 oz., glass *	None
Volatile Organics Soil/Sediment	2 oz. (60 ml VOA Vial)	None
Inorganics Soil/Sediment	8 oz., glass *	None

- * Sample container lids are lined with teflon
- ** All samples will be iced to 4°C upon collection

2.6 Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this investigation will be in accordance with the standard operating procedures as specified in Section 3 and 4 of the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, February 1, 1991.

Surface soil and sediment samples will be collected using a stainless steel spoon and a 2 or 4 quart glass bowl. Containers being analyzed for volatile organic compounds (VOC), will be collected first and directly into the appropriate containers. The remainder of the sample will be collected into the glass bowl, mixed thoroughly, then distributed to the proper containers. Surface soil samples will be collected from a depth of 0 to 6 inches.

Subsurface soil samples will be collected from bore holes advanced using either a hydraulic auger or a hand auger, depending on soil conditions. A clean auger bucket is used to collect the sample after reaching the desired depth, and the VOC containers are filled first. The sample is then collected into the glass bowl, mixed thoroughly, and put into the appropriate containers. Subsurface soil samples will be below the water table to document, if present, an observed release to the groundwater.

Groundwater samples from temporary wells will be collected after the bore hole is advanced using the hydraulic auger or a hand auger, and the well casing is emplaced. The sample is collected using the peristaltic pump, and purged until a reasonably sediment free water sample can be collected. VOC samples are to be collected directly from the teflon tubing in the well, whereas the remainder of the sample will be gathered in the 1 gallon amber glass jug and sequentially distributed into the other

containers. Temporary well samples will be collected from a depth corresponding to the saturation zone.

All laboratory analyses and laboratory quality assurance procedures used during this investigation will be in accordance with standard procedures and protocols as specified in the Analytical Support Branch's Laboratory Operations and Quality Control Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, October 1990; or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

2.7 Investigation Derived Waste

Investigation derived wastes in the form of soils and sludges will be returned to the boreholes from which they were collected. Aqueous wastes such as purged waters from temporary wells will be dispersed at a distance of 5 to 15 feet downgradient of the collection point. Potentially contaminated personal protective clothing will be collected and removed from the site for disposal. Decontamination rinse and wash water will be dispersed onsite when feasible, or drummed and removed for disposal at a later date, if conditions warrant.

REFERENCES

1. U. S. Geological Survey, 7.5 minute series. Topographic Quadrangle Maps of Kentucky: Bryantsville, 1952 (Photo revised 1979); Buckeye, 1952; Lancaster, 1961 (PR 1979); Stanford, 1961 (PR 1979). Scale: 1:24,000.
2. Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Preliminary Assessment for Simmons Casket Company. Filed by Carl Millanti, Manager, Uncontrolled Sites Branch, October 12, 1990.
3. Notification of Hazardous Waste Site (EPA Form 8900-1) for Simmons Casket Company. Filed by Frank Madden, Jr., August 7, 1981.
4. Hannah Leonard, Supervisor of the Frankfort Field Office, Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Memorandum to Carl Schroeder, Manager of the Frankfort Field Office, August 14, 1984. Subject: Drums Left on Site by York Casket Company.
5. U. S. Geological Survey, Reconnaissance of Ground-Water Resources in the Blue Grass Region of Kentucky, Water Supply Paper 1533, 1961.
6. U. S. Geological Survey, National Water Summary 1984, Water Supply Paper 2275, 1984.
7. Linda Aller et al., DRASTIC: A Standardized System for Evaluating Groundwater Pollution Potential Using Hydrogeologic Settings, EPA -600/2-87-075 (Ada, Oklahoma, 1987).
8. U. S. Department of Commerce, Climatic Atlas of the United States, (Washington, D. C.: GPO, June 1968) Reprint: 1983, National Oceanic and Atmospheric Administration.

9. U. S. Department of Commerce, Rainfall Frequency Atlas of the United States, Technical Paper No. 40 (Washington, D. C.: GPO, 1963).
10. U. S. Department of Agriculture, Soil Conservation Service, Soil Survey Map of Allison Abrasives, (1992).
11. R. Allan Freeze and John A. Cherry, Groundwater, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1979.

CARL H. BRADLEY
SECRETARY



WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

*Rec'd 30-90
10 SAS*

*SSI - Re priority
11-30-90 Klein*

October 12, 1990

Craig Benedikt
CERCLA PA/SI Regional Project Officer
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

RE: Preliminary Assessment (2)
Simmons Casket Company
Lancaster, Kentucky
EPA ID# KYD 050-074-889

Dear Mr. Benedikt:

Submitted for your review is the Preliminary Assessment (2) for the Simmons Casket Company. This report is intended to update the Preliminary Assessment dated 21 March, 1984. Based on this report the following conclusions are made:

1. Finishing wastes were generated at the site from 1965 to 1984.
2. Stained soil and unidentified drums were found on the east side of the facility during a site visit in October 1989.
3. There are approximately 1330 potential ground water users located within 4 miles of the site.

As a result of this reassessment, the Kentucky CERCLA PA/SI program is recommending that a high priority Site Screening Investigation be planned for the Simmons Casket Company site.

Sincerely,

A handwritten signature in cursive script that reads "Carl Millanti".

Carl Millanti, Manager
Uncontrolled Sites Branch

CM/CC/RP/kb

Preliminary Assessment (2)

of the former

Simmons Casket Company

Lancaster, Kentucky

by

Carolyn Clark

and

Robert Pugh

Uncontrolled Sites Section

Waste Management Division

Department for Environmental Protection

Commonwealth of Kentucky

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SITE HISTORY

The Simmon Casket Company is located in Lancaster, Garrard County, Kentucky. Wooden and metal (steel, copper, and bronze) caskets were produced at the site from 1965 to 1984. The National Casket Company operated the site followed by Simmons Casket Company, and then York Casket Company.

The first step of the manufacturing process consisted of welding the caskets together. The next step was a 3 stage washer system. The first washer contained a mixture of detergent, from the Dubose Chemical Company, and water. When this solution was spent, it was diluted with soda ash and dumped in the sewer. The other 2 washers contained only water. A concrete berm was located in the washer area to contain overflow from the washers.

The final manufacturing step involved painting and lacquering the caskets. There were 6 paint booths and 2 lacquer booths. A vat used for stripping paint and varnish was also located in the painting/varnishing area.

Paint thinner was the only solvent used at the facility according to a former employee. A small amount of paint thinner was placed on rags and used to wipe off excess paint when necessary. Paint thinner was also placed in the stripping vat.

Hazardous wastes generated at the facility (EPA ID# KYD 05-007-4889) were placed in drums and kept on site until being picked up by the Oil Service Co. of Columbia, KY and taken to Reclaimed Energy Inc. of Connersville, IN.

In 1984, operations at the site ceased. Several drums of waste remained on site until 1985. In 1987 the facility was sold to Allison Abrasives, Incorporated. The facility was renovated and several structural changes took place. The renovations included the removal of three underground storage tanks. No evidence of soil or groundwater contamination was detected. In October of 1987, operations at the facility began. Allison Abrasives produces abrasive wheels.

On October 27, 1989, the Kentucky Department of Waste Management CERCLA conducted a PA site visit at the facility. Several unidentified drums and stained soil were found on the east side of the plant. There was evidence of careless handling of drums (Appendix B).

ENVIRONMENTAL SETTING

The Simmons Casket Company site is located in Garrard County, Kentucky, a part of the outer Blue Grass Physiographic Region. The topography of this area is typically gently rolling hills. Sinkholes are not well developed in this area due to the restriction of groundwater circulation by shaly limestone (U.S.G.S. 1964).

The climate in Garrard County is moderate with warm summers and cool winters. The average annual precipitation is approximately 46 inches. The average annual net precipitation is approximately 11 inches (Appendix F).

The soil at the Simmons Casket Company site is classified as the Lowell series. This soil is typically residuum of interbedded limestone, calcareous shale, and siltstone. A representative profile is 11 inches of brown silt loam, 30 inches of brown, very firm clay and silty clay, followed by 12 inches of gray and yellowish brown mottled, very firm clay. The permeability ranges between 0.2 to 2.0 inches per hour. The pH of the soil

ranges between 4.5 to 7.8 (Appendix F).

The geological formation underlying the site is New Albany Shale of the Devonian Age. It is primarily composed of black shale with fine-grained quartz, crystalline pyrite, fine-grained material which is calcitic, phosphatic, ferric or organic. The New Albany Shale is underlain by Boyle Dolomite which is mostly dolomite and dolomitic limestone (U.S.G.S. 1971 and U.S.G.S. 1960).

Most drilled wells in the area of the Simmons Casket Company site do not produce enough water for a dependable domestic supply. Groundwater obtained from depths greater than 100 feet may contain salt or hydrogen sulfide (U.S.G.S. 1960).

Surface water at the site enters the Lancaster sewer system (Appendix A).

TARGET ANALYSIS

There is no quantitative data to support an air route assessment, therefore, the air route was not evaluated.

Access to the Simmons Casket Company site is not restricted. Consequently, there is the potential for direct contact to local human, animal, and botanical populations.

Municipal drinking water is supplied to local residents by Lancaster Water Works, Garrard County Water Association Incorporated, and Crab Orchard Water District. The Garrard County Water Association and the Crab Orchard Water District purchase water from the Lancaster Water Works which obtains water from 2 lakes located outside of a four mile radius of the site.

A ground water user survey indicates there are approximately 1330 potential ground water users located within a four mile radius of the Simmons Casket Company site. This value was determined by eliminating the areas of municipal supply as provided by water companies. The remaining unserved houses, shown on 7.5 minute U.S.G.S. topographic maps of the area, were multiplied by a 3.8 population conversion factor. The calculated value may be inflated due to the use of cisterns and hauled water in the area (Appendix A).

According to the Kentucky Nature Preserves Commission, there is one statelisted, threatened species, Simpsonaias ambigua, residing within a four mile radius of the site (Appendix H).

REFERENCES

1964, U.S.G.S., Geochemistry of Natural Waters of the Blue Grass Region, Kentucky.

1960, U.S.G.S., Availability of Groundwater in Boyle, Garrard, Lincoln, and Mercer Counties, Kentucky.

1971, U.S.G.S., Geologic Map of the Lancaster Quadrangle, Garrard and Lincoln Counties, Kentucky.

A

OVERSIZED

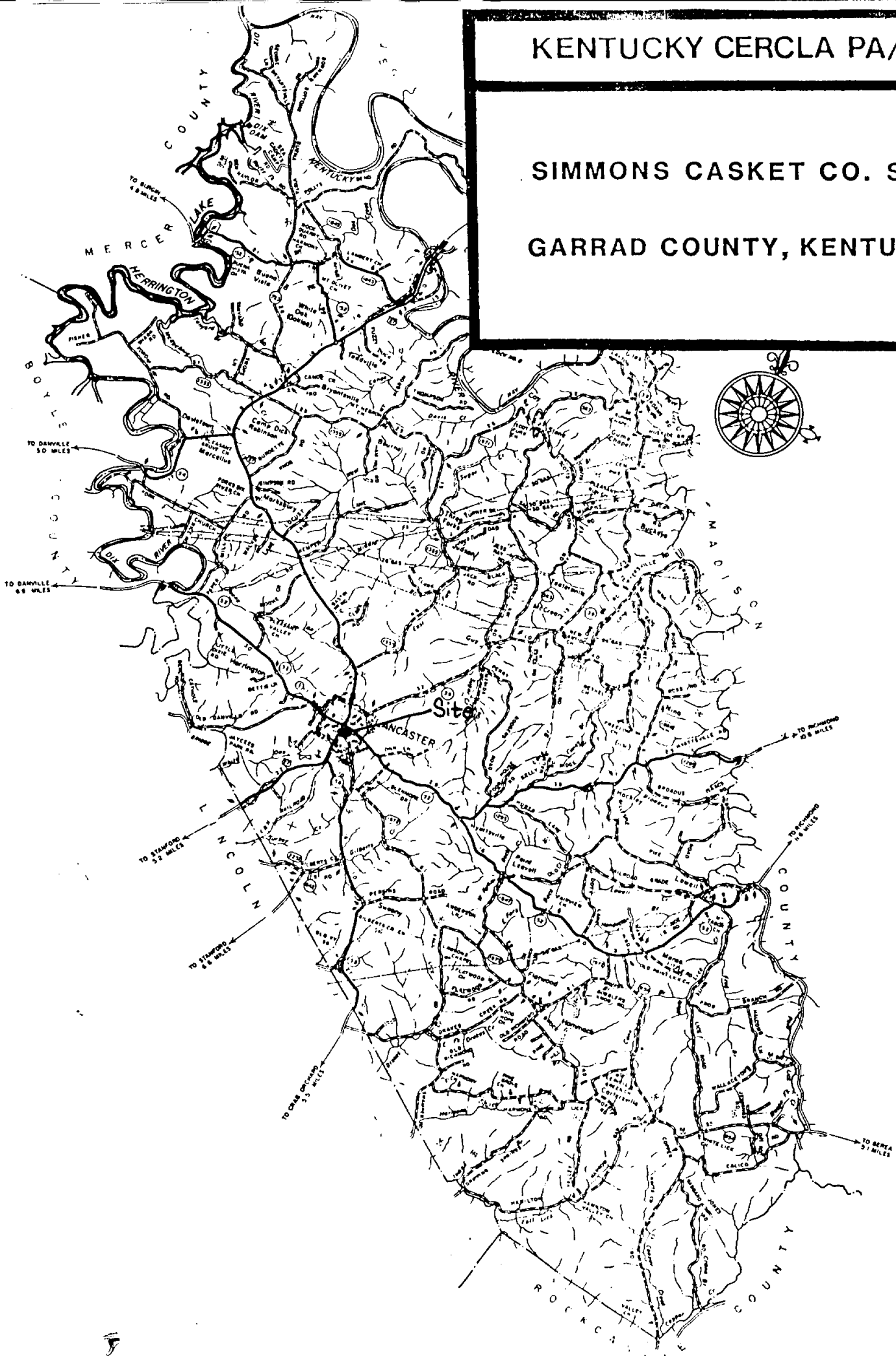
DOCUMENT

MAP

KENTUCKY CERCLA PA/SI

SIMMONS CASKET CO. SITE

GARRAD COUNTY, KENTUCKY

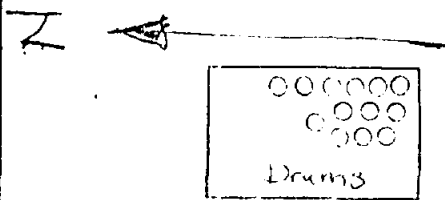


Underground
Storage Tanks
- diesel fuel

Underground
Storage Tanks
A - lacquer
B - paint thinner

Allison Abrasives Site Map

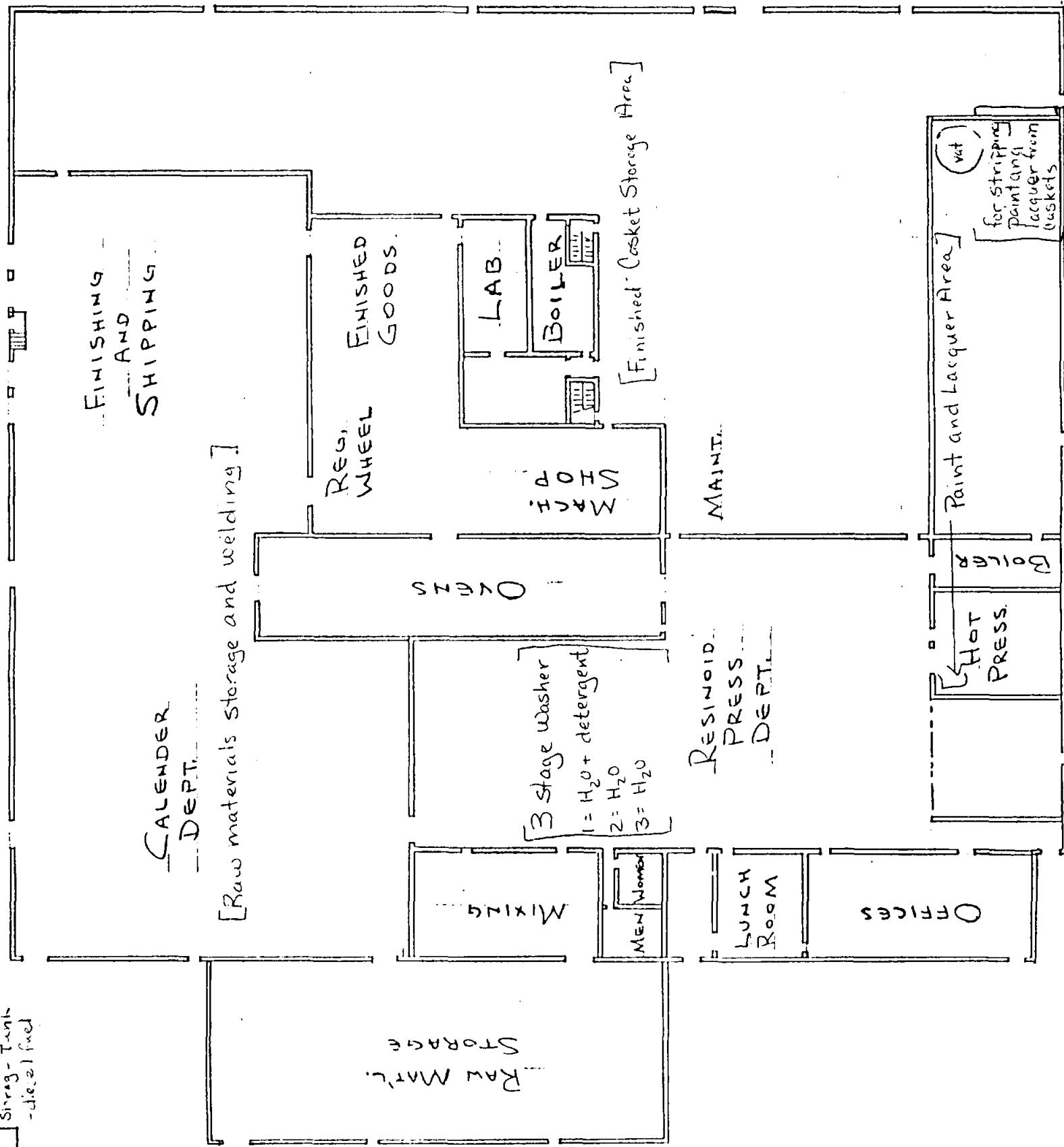
Casket Manufacturing Description in Brackets



[Storage Building]
not currently used

* The Underground
Storage Tanks were
removed in 1987.

SCALE - 1" = 50'



Appendix to the Simmons Casket Company (Allison Abrasives) Site Map

Welding and Raw Materials Area

The parts (composed of steel, copper, and bronze) were stored and welded together in this area.

3 Stage Washer Area

The first washer contained water plus a detergent from the Dubose Chemical Company. The spent washer solution was mixed with 6 bags of soda ash before it was dumped into the sewer system. The other two washers contained only water.

Paint Area

The caskets were sprayed with paint and lacquer in this area. At one end was a vat used to dip and strip lacquer and paint from caskets.

Storage Area and Storage Building

Finish caskets were stored here.

Underground Storage Tanks - removed in 1987

- #1 - contained diesel fuel
- #2 - contained lacquer
- #3 - contained paint thinner

Record of Communication

☒ PHONE CALL

☐ DISCUSSION

☐ ON-SITE

☐ CONFERENCE

☐ OTHER

☐ ON-CALL

Lancaster Water Works

FROM: Carolyn Graycraft

DATE: 5/2/90

TIME:

SUBJECT:

Water distribution w/in 4 miles of the Simmons Casket Co. Site

SUMMARY OF COMMUNICATION:

Municipal water information came from 2 sources: researching the Uncontrolled Sites Branch water lines file and talking to Vivian Cotton of the Lancaster Water Works. Ms. Cotton stated that Lancaster Water Works obtains water from two city lake located southwest of Lancaster off of highway 27 and from the Kentucky River at an intake located more than 4 miles away from Lancaster. Ms. Cotton said Lancaster Water Works sells water Garrard County Water Association and Crab Orchard Water District.

Carolyn Graycraft

CONCLUSIONS, ACTION TAKEN OR REQUIRED:

INFORMATION COPIES

TO:

GROUNDWATER USER DATA DOCUMENTATION

NAME OF SITE: Simmons Casket Company

COUNTY: Garrard

<u>RADIUS</u>	<u>HOUSE/BUILDING COUNT</u>	<u>POPULATION</u>	
1/4 Mile	4	15.2	
1/2 Mile	0	0	
1 Mile	13	49.4	
2 Miles	88	334.4	
3 Miles	72	273.6	3 mile total 672.6
4 Miles	173	657.4	4 mile total 1330.0

METHODOLOGY: House and building counts are taken from U.S.G.S Topographic map(s). These numbers are then multiplied by the conversion factor of 3.8 persons per household, as suggested in EPA's Uncontrolled Hazardous Waste Site Ranking System Users Manual, to obtain populations.

REFERENCES: 7.5 Min U.S.G.S. Topographic Maps: Lancaster Quadrangle
Buckeye Quadrangle
Bryantville Quadrangle
Standford Quadrangle

COMMENTS:

B

(PHOTOGRAPHS)

MEDIA

UNSCANNABLE

2

CHARLOTTE E. BALDWIN
SECRETARY



MARTHA LAYNE COLLINS
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

MEMORANDUM

TO: Caroline P. Haight, Manager *CPH*
Permit Review Branch

FROM: Barry Burrus, Chief *BB*
Uncontrolled Sites Section

SUBJECT: Uncontrolled Site Close-out for Simmons Casket Co. Site
Garrard County

DATE: March 21, 1984

Simmons Casket Co. (now the York Casket Co.) is a manufacturer of wooden and metal caskets. The wastes produced by this facility include solvent waste which are transported to Reclaimed Energy, Inc., Connersville, Indiana by a permitted transporter and non-hazardous paint sludge which is disposed of in a permitted landfill.

Prior to September 23, 1982, this facility was regulated by Part "A" of the Federal Hazardous Waste Facility permit application. This accounts for their inclusion on the ERRIS list. On this date the KYNREPC's Division of Waste Management, acting under RCRA Phase I Interim Authorization, withdrew their Part "A". Investigation of the Division of Waste files has determined that no problems have existed with this company's handling of hazardous waste which would qualify them as an uncontrolled site.

In consideration of the aforementioned investigation, I am recommending no further action to be taken on this site and further recommend that it be removed from the uncontrolled site list.

BB/JC/las

cc: Hannah Leonard
Bob Prewitt
File
EPA



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
KY D050074889

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Simmons Casket Co.		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER P.O. Box 42			
03 CITY Lancaster	04 STATE KY	05 ZIP CODE 40444	06 COUNTY Garrard	07 COUNTY CODE 40	08 CONG DIST
09 COORDINATES LATITUDE 37° 36' 35" N LONGITUDE 84° 34' 45" W					

10 DIRECTIONS TO SITE (Starting from nearest public road)

Site is located on Hwy #39 & 27 South which is the main highway running north and south through the town of Lancaster, Kentucky. To reach the site, travel approximately 7 mile south on Hwy #39 & 27 from its intersection with State Route 52 at the center of town.

III. RESPONSIBLE PARTIES

01 OWNER (If known) Simmons Universal		02 STREET (Business, mailing, residential) 372 Washington Street			
03 CITY Mellesley Hills	04 STATE MA	05 ZIP CODE 02181	06 TELEPHONE NUMBER ()		
07 OPERATOR (If known and different from owner) York Casket Co (formerly Simmons Casket Co)		08 STREET (Business, mailing, residential) P.O. Box 42			
09 CITY Lancaster	10 STATE KY	11 ZIP CODE 40444	12 TELEPHONE NUMBER (606) 792-2101		

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name)
☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify)
☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: ____/____/____ MONTH DAY YEAR
☐ B. UNCONTROLLED WASTE SITE (RCRA 103 ci) DATE RECEIVED: ____/____/____ MONTH DAY YEAR
☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 11/23/83 MONTH DAY YEAR <input type="checkbox"/> NO		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION 1965 To Date BEGINNING YEAR ENDING YEAR <input type="checkbox"/> UNKNOWN			

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Paint thinner waste & Solvent waste transported to Reclaimed Energy Inc., Connersville, Ind. for recycling by permitted transporter: Oil Service Co. Route 3 Petty Lane, Columbia, Tenn. 38401

Paint Sludges non-hazardous disposed of in permitted landfill.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

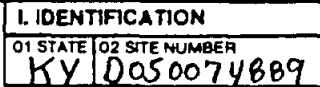
N/A Please refer to Section IV, Part 3 of form.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)			
<input type="checkbox"/> A. HIGH (Inspection required promptly)	<input type="checkbox"/> B. MEDIUM (Inspection required)	<input type="checkbox"/> C. LOW (Inspect on time available basis)	<input checked="" type="checkbox"/> D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Hannah Leonard (Field Supervisor)	02 OF (Agency/Organization) Env. Protection Div. of Waste Mgmt (Frankfort)		03 TELEPHONE NUMBER (502) 564-6716	
04 PERSON RESPONSIBLE FOR ASSESSMENT Jim Childers (Geologist)	05 AGENCY Env. Protection	06 ORGANIZATION Div. of Waste Mgmt	07 TELEPHONE NUMBER (502) 564-6716	08 DATE 3/20/84 MONTH DAY YEAR



☐ I. HIGHLY VOLATILE
☐ J. EXPLOSIVE
☐ K. REACTIVE
☐ L. INCOMPATIBLE
☐ M. NOT APPLICABLE



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
KY D050074009

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ B. SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ C. CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ E. DIRECT CONTACT 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ F. CONTAMINATION OF SOIL 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

N/A

01 ☐ G. DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ H. WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ I. POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
KY 0050074889

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES
(Solids/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: N/A

IV. COMMENTS

Prior to September 23, 1982, this facility was regulated by part "A" of the Federal Hazardous Waste Facility permit application. This accounts for their inclusion on the ERLIS list. On this date the KYNREPC's Division of waste management, acting under RCRA Phase I Interim Authorization, withdrew their part "A". No problems have been detected in their handling of hazardous waste which would qualify the facility as an uncontrolled site.

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, agency analyses, reports)

KYNREPC's Division of waste management files

REGION IV RCRA/HPL POLICY QUESTIONNAIRE FOR INITIAL SCREENING

Site Name: Simmons Casket Company (York Casket Co.)

City: Lancaster State: Ky

Facility I.D. Number: KYD050074889

Type of Facility: Generator Transporter TSD

I. RCRA APPLICABILITY

	yes	no
Does the facility have RCRA interim status?	<u> </u>	<u>✓</u>
Does the facility have a final or post-closure permit? If so, date issued <u> </u>	<u> </u>	<u>✓</u>
Is the facility a non-notifier that has been identified by States or EPA?	<u> </u>	<u>✓</u>
Is the facility a known or possible protective filer?	<u> </u>	<u>✓</u>
Have RCRA wastes been stored onsite for longer than 90 days since November 19, 1980?	<u> </u>	<u>✓</u>
Have RCRA wastes been disposed onsite since November 19, 1980?	<u> </u>	<u>✓</u>

STOP HERE IF ALL ANSWERS TO QUESTIONS IN SECTION I ARE NO

II. FINANCIAL STATUS

	yes	no
Is the facility owned by an entity that has filed for bankruptcy under federal laws (Chapter 7 or 11) or State laws?	<u> </u>	<u> </u>

If yes, what has it filed under?

Chapter 7 Chapter 11 Other

D

CHARLOTTE E. BALDWIN
SECRETARY



MARTHA LAYNE COLLINS
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Division of Waste Management

M E M O R A N D U M

TO: Carl Schroeder, Manager *CS*
Field Office Branch

FROM: Hannah Leonard, Supervisor *HL*
Frankfort Field Office

DATE: August 14, 1984

SUBJECT: York Casket Company (Garrard County)

Attached is a copy of the last manifest for York Casket Company in Lancaster, indicating all hazardous wastes have been shipped off-site. On August 13, 1984, Rnady Carrier, Garrard County Health Department and I visited the facility to make sure the facility had been properly closed.

We found approximately 30 drums still sitting on the loading dock. The drums of hazardous waste had been removed as indicated by the manifest. According to plant personnel the remaining drums contained paints and laquers to be shipped to a York Casket facility in Missouri. A follow-up inspection will be made at a later time to ensure that no drums are left on-site.

HL/blp

HAZARDOUS WASTE MANIFEST

MANIFEST DOCUMENT NUMBER

SHIPPER NUMBER

NAME OF CARRIER

(SCAC)

CARRIER NUMBER

IDENTIFICATION

	12 DIGIT EPA ID #	COMPANY NAME, MAILING ADDRESS, AND TELEPHONE NUMBER	DATE SHIPPED OR RECEIVED
GENERATOR/SHIPPER	120000074889	United Prolet Industries Inc. 606-222-2101 P.O. Box 1202 Columbia, TN	5-17-84
TRANSPORTER #1	120007550017	Mid Service Co. 317-825-7101 Columbia, TN	5-17-84
TRANSPORTER #2 (if required)			
TSD/TREATMENT STORAGE OR DIS- POSAL FACILITY	120000780403	Reclaimed Energy Inc. 317-825-7101 Columbia, TN	
TSD/TREATMENT STORAGE OR DIS- POSAL FACILITY			

WASTE INFORMATION

NO. OF UNITS & CONTAINER TYPE	HM	EPA HAZ. WASTE ID #	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203)	UN # OF NA	EXEMPTION OR NO LABELS REQUIRED	FLASH POINT (IN °C) WHEN REQ'D	UNITS WT/VOL	TOTAL QUANTITY	RATE	CHARGES (For Carrier Use Only)
4 DRUMS		D-001	WASTE SPENT SOLVENTS Flammable Liquid	NA 1993				4		

SPECIAL HANDLING INSTRUCTIONS

If an HQ commodity is spilled on a waterway or adjoining land, the incident must be promptly reported to the Federal government at 1-800-424-8802 (toll free) or 202-426-2675 (toll call). If other DOT Hazardous Materials are discharged creating a serious situation, call shipper's telephone number or Chemtrec 1-800-424-9300 immediately.

COMMENTS

On "Collect on Delivery" shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1

PLACARDS TENDERED

Yes ☒ No ☐REMIT
C.O.D. TO:
ADDRESS

COD

Amt: \$

C.O.D. FEE:
PREPAID ☐
COLLECT ☐TOTAL
CHARGES: \$

FREIGHT CHARGES

FREIGHT PREPAID
except when box is
right is checked ☐ Check box if charges
are to be collected

Note—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ _____ per _____

"If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

Signature

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse to the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or

any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

CERTIFICATION

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the U.S. Environmental Protection Agency

This is to certify acceptance of the hazardous waste shipment.

TRANSPORTER #1 SIGNATURE & DATE

TRANSPORTER #2 SIGNATURE & DATE (if required)

This is to certify acceptance of the hazardous waste for treatment, storage or disposal.

GENERATOR'S SIGNATURE

DATE

TSD/TREATMENT SIGNATURE

DATE

HL/b1p

MEMORANDUM

TO: Daniel R. Dolan, Chief
Hazardous Material Management Section

FROM: Leslie A. Moberly, Environmental Specialist
Hazardous Material Management Section *LAM*

DATE: March 26, 1979

SUBJECT: Hot Line Complaint, Garrard County, National Casket.

On March 20, 1979, I met with Joe Shore, plant manager for National Casket. The purpose of this visit was to discuss a hot Line complaint concerning the disposal of National Casket's waste paint sludge and solvents.

According to Mr. Shore their paint sludge is picked up and disposed of by Stephen's Disposal Company. I verified this information with Hal Stephens who explained that they take the paint sludge to the Garrard County landfill. National Casket is now in the process of completing the special permission/analysis form for the paint sludge.

National Casket's waste solvents, mainly Toluene, are picked up by the George Whitesides Company. I verified this information with the George Whitesides Company.

I contacted the individual who made the complaint and explained the results of my investigation. I would like to note that this individual would like to remain anonymous, to the company in question.

LAM:jlc

ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
OFFICE OF COMMUNICATIONS AND COMMUNITY AFFAIRS

Case # 79-253 Date 3/15/79 Division Referrals 1. H N W M

2:10pm

2.

Problem/Request: Casket Manufacturing Co. is secretly and (illegally) disposing of various paint + lacquer materials. Will not say where they are disposing of waste.

LOCATION: Hwy 39 - South Lancaster, Ky.

DATE OF OCCURENCE past year

COMMENTS: Caller is a city councilman and said the company was illegally disposing of waste at the Stanford Landfill until they were caught last year - now no one knows where they are shipping it or how! - year ago

NAME: Larry Kelly PHONE (606) 792-4116 COUNTY Garrard Co.

ADDRESS: 110 Dogwood Drive CITY Lancaster STATE Ky. ZIP 40444

OTHERS CONTACTED:

Call in response to Star's press conf. 3/14/79

Dolan Dancy Duncan
SIGNATURE

TO BE COMPLETED BY LIAISON:

DIVISION STATUS

ACTION TAKEN:

CONTACTED CALLER BY LETTER PERSONAL INTERVIEW PHONE DATE:

ACTION PENDING

REFERRED TO OTHER DEPARTMENT/DIVISION

MEMORANDUM

TO: Jack E. McClure, Jr., Acting Chief
Hazardous Material Management Section

FROM: Leslie Wilson, Environmental Specialist I
Hazardous Material Management Section

DATE: June 19, 1978

SUBJECT: National Casket in Lancaster, Kentucky

On June 6, 1978, I met with Joe Shore, Purchasing Agent, for National Casket in Lancaster, Kentucky to discuss their present paint sludge disposal practices.

National Casket produces waste composed mostly of paper and wood. They also dispose of paint sludge, waste paint and solvents. Their waste paint and solvents are presently sent to Inland Chemical Corporation for recycling. Their paint sludges are compacted in a 40 yard compactor along with their non-hazardous waste material. Their waste is hauled away by Steven's Disposal in Danville, Kentucky to the landfill in Lancaster, Kentucky.

I have requested that National Casket complete our analysis form for their paint sludge. They dispose of approximately two (2) 55 gallon drums a week.

LW:cjg

C. Frank Harsher, III

~~XXXXXXXXXXXX~~
Secretary



YJB

JULIAN M. CARROLL
Governor

COMMONWEALTH OF KENTUCKY
DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIAL AND WASTE MANAGEMENT
PINE HILL PLAZA
1121 LOUISVILLE ROAD
FRANKFORT, KENTUCKY 40601

November 27, 1979

National Casket Company
Box 42, Industry Road
Lancaster, Kentucky 40444

Howard Co. 100

Attn: Mr. Ron Milburn

Dear Mr. Milburn:

Kentucky's present regulatory program does not permit the disposal of any hazardous waste at other than a permitted hazardous waste management facility. Further, Kentucky does not presently have a permitted chemical landfill.

The Department's special permission system is designed to screen out all hazardous wastes and permit only identifiably non-hazardous material to be disposed of in landfills in the Commonwealth.

We have reviewed the leachate test results of your paint sludge. The high concentrations lead (PB) in your company's waste resulted in it being categorized as hazardous. This determination was made by applying the definitions contained in the proposed Federal Hazardous Waste Regulations (Federal Register, December 18, 1978, p. 58946 et. seq.) and Kentucky Hazardous Waste Regulations and Guidelines.

If you have any questions concerning alternative disposal techniques, out-of-state disposal facilities, or additional information on the special permission request rejection, please feel free to call. A member of our field staff will call on you shortly to discuss potential disposal alternatives.

Sincerely,

Roger Blair

Roger Blair, Director
Division of Hazardous Material &
Waste Management

cc: Pat Haight, Manager
Leslie Moberly, Supervisor
John Brooks, Enforcement



A DIVISION OF WALCO NATIONAL
CORPORATION

606/792-2101

LANCASTER FACTORY

RECEIVED
NOV 16 1979

DIV. OF HAZARDOUS MATERIAL
AND WASTE MANAGEMENT

November 15, 1979

Department for Natural Resources and Environmental Protection
Bureau of Environmental Protection
Division of Hazardous Material
Frankfort, KY 40601

ATTENTION: Ms. Leslie Moberly, Environmental Specialist

Dear Ms. Moberly,

We are enclosing the laboratory test results of the paint
sludge.

The tests were performed by T.M. Regan, Inc.

We received the results promptly and the chemist, W.T. Hummil
was very helpful.

We would appreciate hearing from you regarding the disposal of
the paint sludge as we have not shipped any to the landfill as you
requested.

Thank you for your help.

Sincerely yours,

Joseph Shore
Purchasing Agent

cc Mr. Jim Dinsmore, Plant Engineer
Mr. Frank Madden, Material Manager

enc.

n1

P . O . B O X 4 2 • L A N C A S T E R • K E N T U C K Y 4 0 4 4 4

LABORATORY REPORT
T.M. REGAN, INC.
377 SALLER AVENUE
LEXINGTON, KENTUCKY 40504
Telephone (606) 254-3831

TO: National Carbon Company
1000 ...
Lexington, Kentucky 40504

SAMPLE SOURCE:

1 - ... - total
2 - ... - indicator per EPA procedure

SAMPLE NO. 1 - ...

DATE SAMPLE RECEIVED

TYPE SAMPLE

DATE OF REPORT

RESULTS:

	#1	#2
% Total Solids:	55.	-
Total Dissolved Solids:	N/A	-
% Total Acidity:	N/A	-
% Total Alkalinity:	8.1% as CaCO ₃	-
Flash Point:	>200°F	-
pH:	12.60	-
Arsenic:	4.04 µg/gm	0.001 mg/L
Cadmium:	2.77 µg/gm	0.013 mg/L
Chromium:	111 µg/gm	<0.009 mg/L
Cyanide:	39.6 µg/gm	-
Copper:	359 µg/gm	5.20 mg/L
Mercury:	18.9 µg/gm	0.009 mg/L
Nickel:	111 µg/gm	0.110 mg/L
Lead:	113.204 µg/gm	97.0 mg/L
Zinc:	109 µg/gm	0.020 mg/L
Phenols:	22.4 µg/gm	-

- REMARKS: 1. Laboratory and personnel certified by Commonwealth of Kentucky, Department for Natural Resources and Environmental Protection for compliance with the National Primary Drinking Water Regulations, and for the testing of soil and minespoils. Laboratory Identification No. 00028.
2. Analyses per Standard Methods - latest revision (unless noted).
3. On samples made and/or furnished by the client, the date of sample taking and the date sample received are the same unless otherwise known and noted.
4. Quality control program maintained in accordance with U.S. Environmental Protection Agency regulations and guidelines.

T.M. REGAN, INC.

By

KENTUCKY DEPARTMENT FOR NATURAL RESOURCES
AND ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIAL AND WASTE MANAGEMENT

Application for Permission to Dispose
of Special and/or Hazardous Waste at
a Permitted Disposal Site

FOR AGENCY USE

Received _____
Issued _____
Expires _____
Site No. _____
Approved _____

GENERAL INFORMATION

A. Disposal Site: Lancaster City Landfill 04001
(name) (site no.)
Garrard Lancaster, Ky.
(county) (location)

B. Waste Hauler Waste Generator
Mr. Hal Stevens
Co. Name/Indiv. Name: Stevens Disposal Service National Casket Company
Street: Box 921 Box 42 Industry Rd.
City, State: Danville, Ky. 40422 Lancaster, Ky. 40444
Telephone: 606 236 7700 606 792 2101
Driver's Name: Herb Schulte Person in Charge: Otto Terry

WASTE CHARACTERISTICS Maintenance Foreman

A. Source (Indicate S.I.C. Industry Classification #111-D Paint Sludge 5%
V-BCK 95%.)

B. Description (Descriptive or Common)
1. Indicate Waste Name: Paint Sludge, Paper, Fabrics, Miscellaneous
2. Waste is: Liquid , Solid , Semi-Solid x, Other (check one)
3. Percent of Solids by Volume: 38
4. Expected Volume is: 2000 gallons or Cubic Yards x per year.

C. Properties
1. Acidity-Alkalinity: High Moderate x Low None
As: HCL H₂SO₄ HNO₃ NaOH
NH₄OH Other (list) 1.14% as CaCo 3
2. Volatility: High Moderate Low x None
3. Toxicity (dermal): High Moderate Low x None
4. Toxicity (inhalation): High Moderate Low x None
5. Toxicity (ingestion): High Moderate x Low None
6. Other (describe):

D. Analyses
1. Waste is: Organic Inorganic Mixture ✓ (check one)
2. List organic components (% by weight):
 % %
 % %

National Casket Co. (EPA method)

3. CONCENTRATIONS (mg/L UNLESS INDICATED) (attached original analysis report).

	Leached DISSOLVED	SUSPENDED		
As	0.004		Total Solids (% by Weight)	82.8
Cd	<0.002		Total Dissolved Solids	
Cr	<0.003		Acidity (%)	
CN			Alkalinity (%)	
Cu	0.02		Flash Point (°F)	
Hg	<0.0001		pH	* 7.97
Ni	0.09		Alpha Radiation (pCi/l)	
Pb	<0.05		Phenols	
Zn	0.07		PCBs	
			Asbestos	

Other: * 100g S + 1600ml deionized water stirred for 1 hour and pH of solution taken.

METHOD OF DISPOSAL

A. Waste will be pre-treated/neutralized prior to disposal. Yes ☐ No ☐ (If yes, describe):

B. Is waste to be disposed of in containers? (If so, explain method):
rum ☐ Bag ☐ Box ☐ Cylinder ☐ Loose ☐ (check which)

C. Waste disposal will be accomplished by: (check one or more)

1. Direct sanitary landfill (co-mixed in place) ☐
2. Injection into a completed landfill cell ☐
3. Surface absorption into a completed cell ☐
4. Segregation to an isolated cell ☐
5. Land spreading/discing ☐
6. Buried in original container ☐
7. Other (describe) ☐

SIGNATURE OF APPLICANT
(or Authorized Agent)

DATE: _____

SIGNATURE OF ANALYZING CHEMIST
OR PROFESSIONAL ENGINEER

ADDRESS: McCoy and McCoy

TELEPHONE: 502-821-7375

DATE: 18 November 1977

MC COY AND MC COY,
WATER CONSULTANTS

P. O. BOX 238

MADISONVILLE, KENTUCKY 42431



606/792-2101

LANCASTER FACTORY

January 2, 1980

A DIVISION OF WALCO NATIONAL
CORPORATION

Department of Natural Resources &
Environmental Protection
Pine Hill Plaza
Louisville Road
Frankfort, Kentucky 40601

Attn: Mr. George Parker

Dear Mr. Parker:

This is simply to confirm our phone conversation of this day as regards our continuation permission to use the Lancaster, Kentucky City Landfill.

We have enclosed the following documents as regards the contents of our refuge.

1. EPA Leach Test by McCoy & McCoy.
2. Cover letter by McCoy & McCoy
3. Application for permission to dispose of special materials.
4. Letter from PPG regarding all commodities purchased from them and the lead content of same.
5. Cover letter from PPG

In view of these findings Mr. Parker, we would appreciate your verbal and written approval to continue disposal of the paint sludge at your earliest possible convenience.

Thank you for your past help on this matter.

Sincerely,

Frank B. Madden, Jr.
Materials Manager

FbM/brn

Enc.

cc: Mr. Nathan Buchanan - General Manager Lancaster

Customer Name National Casket Company

REPORT OF CHEMICAL ANALYSIS OF WATER

Sample No.	1	2	3	4	5
Date Collected	12/12/79				
Time Collected					
Date Tested					
Location:	1. Paint - EPA Leach test	4.			
	2.	5.			
	3.				
pH	7.97				
Suspended Solids (Influent)	PPM				
Suspended Solids (Effluent)	PPM				
Biochemical Oxygen Demand 5 Day (Influent)	PPM				
Biochemical Oxygen Demand 5 Day (Effluent)	PPM				
Fecal Coliform	MPN/100 ml.				
Total Dissolved Solids	PPM				
Total Iron	PPM				
Fluoride	PPM				
Total Alkalinity	PPM				
Phenolphthalein Alkalinity	PPM				
Total Hardness	PPM				
Dissolved Oxygen	PPM				
Ammonia Nitrogen	PPM				
Residual Chlorine	PPM				
Total Coliform	MPN/100 ml.				
Carbon Dioxide	PPM				
Sulphates	PPM				
Chlorides	PPM				
Turbidity	PPM				
Manganese	PPM				
Complex Phosphate	PPM				
Calcium	PPM				
Chromium	PPM	< 0.003			
Zinc	PPM	0.07			
Flow Rate	(Unit)				
Mercury	PPB	< 0.10			
Selenium	PPM				
Arsenic	PPB	4.00			
Barium	PPM				
Cadmium	PPM	< 0.002			
Lead	PPM	< 0.05			
Nitrate Nitrogen	PPM				
Silver	PPM				
Chemical Oxygen Demand	PPM				
Total Solids % by weight		82.80			
Organics					
Endrin					
Lindane					
Methoxychlor					
Toxaphene					
2,4-D					
2,4,5-TP					
Copper	PPM	0.02			
Nickel	PPM	0.09			

Remarks:

- All analysis performed as per 15th Edition Standard Methods for Water and Wastewater Analysis, unless otherwise noted.
- Laboratory and personnel certified by Commonwealth of Kentucky Department of Environmental Protection - Manager for Health Services for bacteriological analysis.

1 PPM = 1 mg/l

By

J. S. Cherry
McCoy & McCoy

Laboratories:
Paducah, Ky.
Pikeville, Ky.



McCoy
& McCoy, INC.

Environmental Consultants

P. O. Box 238 • 85 East Noel Avenue • Madisonville, Kentucky • Phone 502-821-7375

19 December 1979.

Mr. Frank Madden
National Casket Company
P.O. Box 42
Lancaster, KY. 40444

Dear Mr. Madden:

Enclosed are the data for the analysis of the paint sludge we received from you dated 12 December 1979.

We performed the leach test following the EPA guidelines, i.e., a certain weight of sample is mixed with deionized water (100 g sample and 1600 ml water), stirred continuously for 24 hours with the pH adjusted and maintained between 5.0 and 5.2, diluted to 2 liters at the end, filtered, and analyzed.

In effect, the stirring at a specified pH theoretically duplicated the action of nature upon this substance if it rained 72 inches over a two year period.

Your analyses in the past might differ from our data but you should be sure that the leachate was tested and not the sludge material itself. If this particular solid was analyzed directly, I have little doubt that certain metallic constituents would present themselves in greater abundance than was observed in the leachate.

If there are any questions you feel are unanswered, please call me and I will endeavor to answer them.

Sincerely,

Gerald L. Chaney
Gerald L. Chaney



PPG INDUSTRIES, INC./10800 SO. 13TH STREET/OAK CREEK, WISCONSIN 53154/AREA 414/764-6000

December 12, 1979

National Casket
P. O. Box 42
Lancaster, Kentucky 40444

Attention: Mr. Nathan Buchanan, General Manager


Subject: Lead Content of Materials Supplied
to National Casket

Dear Nate:

Attached is a list of all materials supplied to National Casket by PPG during 1979, along with the lead content as a weight percent of the nonvolatile.

From this list, it is a mystery to us where the high lead content in your paint sludge is coming from. We have received your samples from Frank Madden and these have been sent to Research & Development for analysis. I will inform you of results as soon as I receive word from our Analytical Department. If you have further questions, please advise.

Sincerely,


T. F. Arndorfer
Project Leader
Industrial Solvent Base Coatings

kjl

Attachments

cc: T. A. Craig
C. R. Guinn
W. H. English
M. A. Secreto
R. Beuke
F. Madden, National Casket



Code	Description	Lead Content
6-256	Vista Green Enamel	Less Than .06%
2151-96	Trans Red Oxide Tint	" " "
2151-410	Trans Yellow Oxide Tint	" " "
2150-3906	Trans Red Oxide Tint	" " "
2435-4606	Lampblack Tint	" " "
98267	White Acrylic Enamel	" " "
E5234	Gray Primer Surfacer	" " "
ML31709	Blending Solvent	" " "
ML35212	Ebony H/S Color Coat	" " "
ML35870	Monarch Blue Color Coat	" " "
ML35871	Colonial Bronze Color Coat	" " "
ML35887	Hyacinth Dye Solution	Less Than .05%
ML35893	Platinum Color Coat	Less Than .06%
ML36098	Clear A.D. Lacquer	" " "
ML36135	Walnut Stain	Less Than .05%
ML36136	Brown Dye Solution	Less Than .06%
ML36144	Medallion Bronze Color Coat	" " "
ML36457	Gray Primer Surfacer	" " "
ML36518	Midnight Bronze Color Coat	" " "
ML36587	Clear Lacquer	" " "
ML36588	Clear Lo Cure Topcoat	" " "
ML36639	Lo Cure Super Enamel	" " "
ML36640	Non-Yellowing White	" " "
ML36641	Non-Yellowing Clear	" " "
ML36563	Aspen White Lacquer	" " "

Code	Description	Lead Content
RM5485	Aluminum Flake	Less Than .06%
UC31995	Anti-Crater Agent	" " "
W25058	Lampblack Tint	" " "
W25059	Phthalo Blue Tint	" " "
W25061	Phthalo Green Tint	" " "
W25068	Trans Red Oxide Tint	" " "
W25069	Trans Yellow Oxide Tint	" " "
W25070	Carbon Black Tint	" " "
W25071	Iron Blue Tint	" " "
W25073	Bon Red	" " "
W26124	Thio Maroon Tint	" " "
W26790	Catalyst	" " "

MEMORANDUM

TO: John Brooks, Acting Chief
Enforcement Section

FROM: Marsha Swain, Public Health Rep. II *MS*

DATE: March 18, 1980

SUBJECT: Garrard County #~~040-00~~
National Casket - Lancaster KY.

On March 17, 1980, I was asked to take a compliance sample of National Casket's paint sludge due to the variation of lead and pH analysis submitted by them.

I met with Frank Madden, Materials Manager. He explained that the analysis would always be different due to the fact that their sludge came from three different processes. These processes are the Primer Coat, the Color Coat, and the Top Coat. When these holding tanks need cleaning out, the film at the top is scraped off and put in a drum. The tanks are skimmed when needed. This results in different quantities of scum from each process being deposited in the drum which results in different analyses.

I took a sample from the Primer Coat tank. I only took one sample from the Color Coat tank even though there are 2 tanks. The composition from these two tanks are the same. This was verified visually as one half of the casket is painted at one color coat tank and then the other side is painted at the other color coat tank. I then took a sample from the Top Coat tank.

It appeared that the only variation which would appear in future samples would involve the Color Coat tank, depending upon which color is sprayed on the caskets.

There was no composite sludge available for testing. Even if there had been, it would not be representative of the waste.

These samples were then dropped off to T.M. Reagan's lab in Lexington. I spoke to Thomas Hummel, Chief Chemist, about the processes and analyses. It was decided to wait until today before testing began. This is to give our Division time to discuss if we want the lead and pH run on all of them. Hannah Leonard is to contact the lab today as to procedures. There is also the possibility that we may require the company to pay for the analysis.

I offered to give half of the samples to National Casket, but they deemed it not necessary.

MS/sar

cc: Hannah Leonard

McCOY & McCOY, Inc.

Environmental Consultants

P.O. BOX 238
P.O. BOX 1411
P.O. BOX 208

MADISONVILLE, KENTUCKY
PADUCAH, KENTUCKY
PIKEVILLE, KENTUCKY

42431
42001
41501

REPORT DATE. 10/12/81

PAGE NO. 1

National Casket Company
Attn: Steve Vinson
P. O. Box 42
Industry Road
Lancaster, KY 40444

LOCATION NO.

SAMPLE DATE

1. Paint Sludge Combined 9/17/81

2. _____

3. _____

4. _____

5. _____

REPORT OF CHEMICAL ANALYSIS

TEST DESCRIPTION

1

2

3

4


5

pH	STD	7.35			
TOTAL SOLIDS	%/wt.	43.5			
CHROMIUM	PPM	0.003			
MERCURY	PPB	5.6			
SELENIUM	PPM	< 0.001			
ARSENIC	PPM	< 0.005			
BARIUM	PPM	0.42			
CADMIUM	PPM	0.007			
SILVER	PPM	0.01			
LEAD	PPM	0.09			

Remarks:

1. All analysis performed as per 14th Edition Standard Methods for Water and Wastewater Analysis unless otherwise noted.
2. Laboratory and personnel certified by Commonwealth of Kentucky - Department for Human Resources - Bureau for Health Services for bacteriological analysis.
3. 1 PPM = 1 mg/l

By


For McCoy & McCoy, Inc.

McCOY & McCOY, Inc.

Environmental Consultants

P.O. BOX 238
P.O. BOX 1411
P.O. BOX 208

MADISONVILLE, KENTUCKY
PADUCAH, KENTUCKY
PIKEVILLE, KENTUCKY

42431
42001
41501

REPORT DATE. 10/12/81

PAGE NO. 2

LOCATION NO.

SAMPLE DATE

National Casket Company
Attn: Steve Vinson
P. O. Box 42
Industry Road
Lancaster, KY 40444

1. Paint Sludge Combined 9/17/81
2. _____
3. _____
4. _____
5. _____

REPORT OF CHEMICAL ANALYSIS

TEST DESCRIPTION		1	2	3	4	5
OPPER	PPM	0.01				
ICKEL	PPM	0.95				
INC	PPM	1.03				

Remarks:

- All analysis performed as per 14th Edition Standard Methods for Water and Wastewater Analysis unless otherwise noted.
- Laboratory and personnel certified by Commonwealth of Kentucky - Department for Human Resources - Bureau for Health Services for bacteriological analysis.
- 1 PPM-1 mg/l

By

R. J. Plummer

For McCoy & McCoy, Inc.

001

MEMORANDUM

TO: Art Curtis
Chief, Plans Review Section

THROUGH: Carl Schroeder
Manager, Field Operations Branch *eat.*

FROM: Hannah Leonard *HL*
Supervisor, Frankfort Field Office

DATE: November 12, 1981

SUBJECT: Simmons Casket Company Special Permission Disposal (Garrard County)
(formerly National Casket Company)

On January 8, 1980, Simmons Casket Company was granted special permission for the disposal of a paint sludge at the City of Lancaster Landfill #040.06 in Garrard County. Quarterly leach tests for lead were required but only recently has the analysis been specifically requested.

Attached is the most recent analysis, given to me by Steve Vinson, Industrial Engineer for Simmons, on November 4, 1981. Lead is well below the limits set for EP toxicity. There have been no problems with this waste at the landfill and I do not recommend any changes at this time.

HL:blp

cc: files

KENTUCKY DEPARTMENT FOR NATURAL RESOURCES
AND ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS AND WASTE MANAGEMENT

APPLICATION FOR PERMISSION TO DISPOSE
OF SPECIAL AND/OR HAZARDOUS WASTE AT
A PERMITTED DISPOSAL SITE

I. General Information

A. Disposal Site: Lancaster
(NAME) (SITE NO.)
Garrard
(COUNTY) (LOCATION)

B. Waste Hauler Waste Generator

Co. Name/Individual: Simpson's Same
Street: Box 42
City, State: Lancaster, Ky.
Telephone: 792-2101
Driver's Name: Green Clark

II. Waste Characteristics

A. Source (Indicate S.I.C. Industry Classification) _____

B. Description (Descriptive or Common)

1. Indicate Waste Name: Paint Sludge
2. Process Name: Painting
3. Expected organics in waste: _____
4. Waste is: Liquid _____, Solid _____, Semi-Solid _____, Other _____
5. Expected Volume is: _____ Gallons _____ or Cubic Yards _____ per year.

C. Properties

1. Acidity-Alkalinity: High _____ Moderate _____ Low _____ None _____
As: HCL _____ H2SO4 _____ HNO3 _____ NaOH _____
NH4OH _____ Other (List) _____

2. Volatility: High _____ Moderate _____ Low _____ None _____

3. Toxicity (dermal): High _____ Moderate _____ Low _____ None _____

4. Toxicity (inhalation): High _____ Moderate _____ Low _____ None _____

5. Toxicity (ingestion): High _____ Moderate _____ Low _____ None _____

6. Radiation: No possibility of radiation _____

7. Other (Describe): _____

VI. Special Analyses

A. Total Organic Carbon

1. % Total Carbon _____
2. % Total Inorganic Carbon _____
3. % TC-%TIC=%TOC= _____

B. Organic Composition Analysis

When results indicate high % TOC, or high velocity, or low Flashpoint determine organics on unfiltered uncentrifuged leachate, or original sample.

compound	concentration	compound	concentrated
1. PCB's	_____	5. _____	_____
2. Phenols	_____	6. _____	_____
3. _____	_____	7. _____	_____
4. _____	_____	8. _____	_____

C. Acitivity

When radioactive material is present in waste (see Section II, Line 6) test sample for activity.

Alpha radiation (pCi/l) _____

D. Other Analyses (as specified)

VII. Signature of Analyzing Chemist

Doug Wolfe
Date: 10-13-81 Telephone: 502-821-7375

McCoy & McCoy, Inc.
Environmental Consultants
P.O. Box 238
Madisonville, Ky. 42431

NATIONAL CASKET COMPANY
Combined Paint Sludge

III. Method of Disposal

- A. Waste will be pre-treated/neutralized prior to disposal. Yes ___ No ___
(If yes, describe): _____
- B. Is waste to be disposed of in containers? If so, explain method:
Drum ___ Bag ___ Box ___ Cylinder ___ Loose ___ (check which)
- C. Waste Disposal will be accomplished by: (Check one or more)
1. Direct sanitary landfill (co-mixed in place) _____
 2. Injection into a completed landfill cell _____
 3. Surface absorption into a completed cell _____
 4. Segregation to an isolated cell _____
 5. Land Spreading/discing _____
For land spreading, fill out Appendix A:
Land Spresing, and attach to this form.
 6. Buried in original container _____
 7. Other (describe) _____

Signature of Applicant (or Authorized Agent)

Date: _____ Telephone: _____

REPORT ON ANALYSIS

(Please Attach Original Analysis Report)

Note: Analysis results should be given in ink and signed by the individual assuming responsibility for the tests. Read "Instructions" before performing tests.

IV. Analysis of Leachate

A. Leachage Metal Concentrations in Milligrams/Liter

- | | |
|-------------------------|--|
| 1. Ag <u>0.01</u> | 6. Hg <u>0.0052</u> |
| 2. As <u>< 0.005</u> | 7. Pb <u>0.09</u> |
| 3. Ba <u>0.42</u> | 8. Se <u>< 0.001</u> |
| 4. Cd <u>0.007</u> | 9. Other (as specified) <u>See Below</u> |
| 5. Cr <u>0.003</u> | 10. Total Dissolved Solids _____ |

V. Analyses on Original Sample Cu 0.01; Ni 0.95; Zn 1.03

- | | |
|--------------------------------|---|
| 1. Flashpoint (°F) <u>----</u> | 5. Total Solids (% by weight) <u>43.5</u> |
| 2. pH <u>7.35</u> | 6. Total Fixed Residue <u>-----</u> |
| 3. Cyanide <u>----</u> | 7. Total Volatile Residue <u>-----</u> |
| 4. Phenol <u>----</u> | (TS-TFR=TVR) |

KENTUCKY DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
GENERATOR INSPECTION SHEET

Facility Name SIMMONS CASKET Registration # KYD05-007-4089

County GARRARD Date 5-21-02 Time 1:15 p.m. Routine ☒ Followup ☐

Type of Operation PAINTING OPERATION

A. VERIFICATION OF REGISTRATION

C NC N/A

1. Operations consistent with Registration

(☒)(☒)()

B. RECORDS/MANIFESTING

1. Test results and waste analysis records maintained
2. Manifests correct/complete
3. Manifests maintained (Generator's copy and/or returned TSD facility copy)
4. Exception report submitted and maintained
5. Annual reports submitted and maintained
6. Notification of international shipments

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C. WASTE STORAGE

1. Containers meet DOT requirement
2. Condition of containers
3. Containers labeled and marked properly
4. Beginning of waste accumulation dated
5. Ninety (90) day accumulation
6. Containers holding ignitable or reactive waste are located fifty feet or more from the facilities property line

(☒)() ()

(☒)() ()

() (☒) ()

() (☒) ()

(☒)() ()

(☒)() ()

C. WASTE STORAGE (continued)

C NC N/A

7. The storage of ignitable, reactive or the mixture of incompatible waste is conducted so that it does not produce extreme heat, pressure, toxic or flammable fumes, violent reaction or damage the container's structural integrity.
8. Storage area(s) are inspected by owner/operator at least weekly by log.
9. Personnel have been trained in emergency procedures.
10. Hazardous waste storage tanks designed to prevent or contain spills.
11. Contingency Plan Maintained at Facility *

(☒)() ()

() (☒) ()

() () ()

() () ()

() () ()

D. MISCELLANEOUS INFORMATION

1. Previous non-compliances corrected Yes No N/A
2. Photographs Yes No N/A
3. Samples collected Yes No N/A
4. Type of analysis required Yes No N/A
5. Other existing environmental permits (list)

NON-COMPLIANCES

Remedial Measures and Expected Correction Date: only one drum is currently

1,1,1-Trichloroethane needs to be added to registration. Two drums of 1,1,1-Trichloroethane and 1 drum paint thinner need labels. Log needs to be kept weekly. Log is maintained which tells when drums are placed in storage area and date drums are shipped. * Contingency plan needs work.

INVESTIGATOR'S SIGNATURE: Jannah Leonard TITLE: ENVIRONMENTAL SUPERVISOR

I hereby acknowledge receipt of a copy of this report and do further acknowledge that I have been apprised of the discrepancies and alleged violations noted during the inspection.

SIGNED: E. S. Vinton TITLE: Engineer

* Explanation of inspection categories on reverse side

** C = Compliance NC = Non-Compliance N/A = Not Applicable

September 23, 1982

Mr. Steve Vinson
Industrial Engineer
Simmons Casket Company
P.O. Box 42
Industry Road
Lancaster, Kentucky 40444

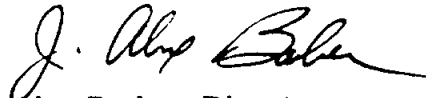
RE: EPA I.D. KYD05-007-4889

Dear Mr. Vinson:

The Division of Waste Management, acting under RCRA Phase I Interim Authorization (as published in the April 1, 1981, Federal Register), is withdrawing your U.S. EPA form 3510-1 known as the Federal Hazardous Waste Facility permit application part "A". The U.S. EPA has determined that your company can terminate their interim status as a storage facility without complying with 40 CFR Part 265 Subparts G and H, provided they continue to use the area for storage of hazardous waste which will be removed within the 90 day limit and are in compliance with 40 CFR 262.34. If your company no longer intends to use the area for storage of hazardous wastes, it must be closed in accordance with 40 CFR Part 265 Subpart G and H.

If you have any questions on this, please contact James A. Determann of this office at (502) 564-6716, Ext. 248.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Alex Barber", with a stylized flourish at the end.

J. Alex Barber, Director
Division of Waste Management

JAB:JAD:cg

cc: James H. Scarbrough, U.S. EPA
Field Supervisor

JACKIE SWIGART
SECRETARY



JOHN Y. BROWN
Governor

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Division of Waste Management
March 23, 1983

Mr. Steve Vinson
York Casket Company (formerly Simmons Casket Co.)
P.O. Box 42
Lancaster, Kentucky
Garrard Co.

Dear Mr. Vinson:

During an inspection on March 18, 1983, it was determined that wastes shipped from your facility on March 10, 1983, had been stored for more than 90 days. It is a violation of 401 KAR 32:030, Section 5(2) formerly 401 KAR 2:070, Section 3 (5)(6) to accumulate hazardous wastes for more than 90 days without a storage facility permit.

Although the problem appears to be caused by personnel changes, wastes must be shipped within 90 days. The regulations only allow the Cabinet to grant an extension of up to 30 days if there are unforeseen, temporary, uncontrolled circumstances.

York Casket Company will be required to obtain a permit for a hazardous waste storage facility if, in the future, we determine that additional violations of KAR 32:030, Section 5(2) exist.

If you have any questions, please feel free to contact me at (502) 564-6716-275.

Yours truly,

Hannah Leonard /na

Hannah Leonard, Supervisor
Frankfort Field Office
Div. of Waste Management

HL/blp

cc: Carl Schroeder

CHARLOTTE E. BALDWIN
SECRETARY



MARTHA LAYNE COLLINS
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601
Division of Waste Management

MEMORANDUM

TO: Carl Schroeder, Manager *CS*
Field Operations Branch

FROM: Hannah Leonard, Supervisor *HL*
Frankfort Field Office

DATE: May 10, 1984

SUBJECT: York Casket Closure Inspection (Garrard County)

On May 2, 1984 during an inspection of the City of Lancaster Landfill, I was told by the operator that the local industry, York Casket Company, had closed on April 27, 1984. Later that day, Leslie Brown and I inspected the York facility to determine if all hazardous wastes had been shipped off-site to a permitted TSDF.

No one was available to talk to us, but on-site personnel did take us out to the storage area where we found 3 drums of waste, 1,1,1-Trichloroethane and 1 drum of paint thinner. The drums were properly labeled and in good condition. The accumulation dates were well within the 90-day limit.

On May 9, 1984 I contacted Ed Doyle, plant manager, by phone. Mr. Doyle told me they were waiting until closure and clean-up of the plant was completed before shipping the wastes off-site (in case additional hazardous wastes were generated). I then asked Mr. Doyle to send me a copy of the manifest after the wastes were shipped off-site. After I receive a copy of the manifest I plan to stop by the facility and check the storage area to ensure no hazardous wastes are left on-site.

HL/blp

RECEIVED
MAY 21 1 27 PM '84
DIVISION OF
WASTE MANAGEMENT

CHARLOTTE E. BALDWIN
SECRETARY



YORK CASKET CO.
GARRETT CO.

MARTHA LAYNE COLLINS
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Division of Waste Management
March 11, 1985

RECEIVED
MAR 11 3 22 PM '85
DIVISION OF
WASTE MANAGEMENT

York Casket Company
P.O. Box 42
Lancaster, Kentucky 40444

Attention: Ed Doyle

Dear Mr. Doyle:

A March 1, 1985 inspection of the York Casket plant in Lancaster showed drums of waste still remain on-site. Before the Division of Waste Management can consider your site properly closed, these drums must be disposed of at a permitted disposal site.

If the wastes are nonhazardous they can go to a local permitted residential landfill. However, the material cannot go to a residential landfill without prior approval from the Division. Enclosed is an application for a permit modification to dispose of this material. If you do not have sufficient information to demonstrate the contents are nonhazardous, the drums must be sampled and analyzed to make a determination.

To avoid an enforcement action, which could result in the assessment of penalties, you must respond to this letter by no later than March 22, 1985.

If you have any questions, please feel free to contact me at (502) 564-6716-extension 275.

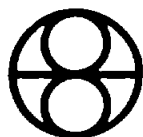
Yours truly,

Hannah Helm, Supervisor
Frankfort Field Office
Div. of Waste Management

HH/blp

cc: Carl Schroeder

Frankfort P.O.



Hälmarsk
CASKET COMPANY

APR 22 10 55 AM '85

RECEIVED
DIVISION OF
WASTE MANAGEMENT

April 17, 1985

Division of Waste Management
18 Reilly Road
Frankfort, KY. 40601

ATTN: Jim Determann

Dear Mr. Determann:

Please withdrawal York Casket Co. (Garrard County) as
Generator of Hazardous Waste in conjunction with the plant
shutdown of May 4, 1984.

The records for the plant will be stored at George and
Alloys Streets, Marshfield, MO. 65706. The person to contact
would be myself.

Sincerely,

Bob Kotarba
Vice President of Operations-West

BK/dw

**DIVISION OF WASTE MANAGEMENT
KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION
1984 HAZARDOUS WASTE GENERATOR ANNUAL REPORT**

FOR OFFICE USE ONLY: ☐

INSTRUCTIONS: This report is to be completed by all hazardous waste Generators registered within the Commonwealth of Kentucky. The report must be completed using the signed copies of the hazardous waste manifests retained by the generator for the calendar year 1984. Complete instructions for each information category are found on the back of this form. The report must be submitted to the Division of Waste Management, 18 Reilly Road, Frankfort, KY 40601 by March 1, 1985. Questions may be addressed to the Annual Report Coordinator at (502) 564-6716.

PAGE _____ OF _____

(1) GENERATOR EPA ID NUMBER: KYD050074899

(2) GENERATOR NAME: YORK CASKET CO.

(3) GENERATOR MAILING ADDRESS: INDUSTRY ROAD, LANCASTER, KY.

(4) CONTACT PERSON: BOB KOTARBA

(5) TELEPHONE NUMBER: 417 468-6500

(6) SIC CODES:

(7) TRANSPORTATION SERVICES USED:

PRIMARY TRANSPORTER (from the Manifest form)	NUMBER OF MANIFESTED SHIPMENTS TRANSPORTED	TOTAL QUANTITY	UNIT of volume	CONTAINER TYPES USED BY TRANSPORTER
ID NUMBER: <u>KND080556019</u> NAME: <u>OIL SERVICE CO.</u> ADDRESS: <u>P.O. BOX 1203</u> <u>COLUMBIA, TN.</u>	2	770	G	DM
ID NUMBER: <u> </u> NAME: ADDRESS:				
NUMBER: <u> </u> NAME: ADDRESS:				
ID NUMBER: <u> </u> NAME: ADDRESS:				
ID NUMBER: <u> </u> NAME: ADDRESS:				

RECEIVED
DIVISION OF
WASTE MGMT
APR 22 10 55 AM '85

USE ADDITIONAL SHEETS AS NECESSARY TO IDENTIFY ALL PRIMARY TRANSPORTERS USED IN 1984.

(8) COMMENTS:

CERTIFICATION:

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS, AND THAT BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

BOB KOTARBA

PRINT OR TYPE NAME

SIGNATURE

4/17/85

DATE SIGNED

GE LATOR EPA ID NUMBER: KYDC50074089

PAGE OF

APR 22 10 55 AM '85
RECEIVED
DIVISION OF
WASTE HAZARDOUS
AGENT

USE ADDITIONAL SHEETS AS NECESSARY TO IDENTIFY ALL FACILITIES WHICH RECEIVED WASTE FROM THE GENERATOR IN 1984.

WASTE MINIMIZATION STATEMENT

☐ YES ☐ NO

In 1984, did your company have a program in place to reduce the volume or quantity and toxicity of your hazardous waste?

● If Yes, describe the program briefly:

17/A

• If No, will your company establish such a program? ☐ YES ☐ NO ☐ N/A

☐ YES ☐ NO

Are the methods of storage, treatment or disposal used by your company in 1984 the most practicable methods currently available to minimize the present and future threat to human health and the environment? Explain:

2/2

GENERATOR EPA ID NUMBER: KYD050074899

Page _____ of _____

RECEIVED
DIVISION OF
WASTE MANAGEMENT
APR 22 10 55 AM '85

July 22, 1985

Mr. Carl H. Tiedt
Hallmark Casket Co.
P.O. Drawer G
Marshfield, MO. 65706

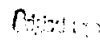
RE: York Casket - EPA I.D. KYD05-007-4889 - Garrard Co.

Dear Mr. Tiedt:

This letter is in response to your April 10, 1985, letter requesting a change in your generator status for your Kentucky site. We have reviewed your request and concur with your determination. Therefore, we are changing your generator status to that of closed. We will retain your EPA Identification Number and if at some time in the future your site becomes a hazardous waste generator it will only be necessary for you to register that activity with this office.

If you have any questions, please feel free to contact James Determann of this office at (502) 564-6716, Ext. 231.

Sincerely,


Caroline Patrick Haight
Manager, Permit Review Branch
Division of Waste Management

CPH:JAD:cg

cc: Hannah Helm, Area Supervisor
Ann Cole, U.S. EPA Region IV
Tim Hockensmith, Revenue Cabinet

CARL H. BRADLEY
SECRETARY



WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Division of Waste Management
February 6, 1989

Mr. L.G. Osborne
Allison Abrasives, Inc.
P.O. Box 192
163 Industry Road
Lancaster, Kentucky 40444

Der Mr. Osborne:

After reviewing the MSD sheets and discussing your waste with the Division's Solid Waste Branch, an analyses of the waste is required. Please complete the new "Application to Accept an Additional Waste Stream" enclosed by following the instructions attached. The Division is in receipt of your \$50.00 application fee so disregard section D of the application. If you have any questions, please contact me at (502) 564-6716.

Sincerely,

A handwritten signature in cursive script, appearing to read "C. Brad Lyon".

C. Brad Lyon
Acting Supervisor
Frankfort Regional Office

155
1.22.88
1.25.89
1.27.89

CK No. 17973 - \$50.00

ALLISON ABRASIVES, INC.

Quality Abrasive Cut-Off Wheels Since 1919

53 Industry Road, Box 192
Lancaster, Kentucky 40444
(606) 792-3033 • Telex 93-9031

January 22, 1988

Mr. Shelby Jett
Manager, Solid Waste Branch
Division of Waste Management
18 Reilly Road
Frankfort, KY 40601

Gentlemen:

This letter is in regard to the scrap material generated from our manufacturing operation in Lancaster, Kentucky. The Stevens Bros. Disposal Service of Danville is removing this material and request information regarding its non-toxic nature.

Reference to the MSDS for the raw materials used indicates that certain of these materials have been determined to be toxic by standards included in the OSHA Right-To-Know Legislation.

These materials fall into two categories:

- 1) Abrasives and fillers used that may be toxic if TLV levels are exceeded in the workplace.
- 2) Phenolic Resins that when uncured contain small quantities of phenol or formaldehyde.

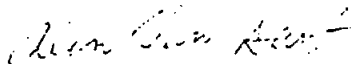
Processing of these materials into finished products produces scrap wherein the nature of the raw materials has been materially altered:

- 1) Abrasives and fillers become encapsulated in a phenolic resin bond that eliminates any dust hazard.
- 2) Phenolic Resins used are cured by heat that eliminates phenol or formaldehyde contaminants.

Should there be some dust in the scrap material, it would seem unlikely that this would pose any problems when disposal is accomplished in an outside land fill.

If there are any questions, please contact us at our Lancaster location.

Very Truly Yours,



Alan Van Sant
Manager, Research & Development

AVS/bkm

cc: D. A. Farmer
Ray Williams

APPLICATION FOR DISPOSAL PERMIT MODIFICATION
OF SPECIAL OR INDUSTRIAL WASTE

Part I: Generator, Waste, and Disposal Information

- A. Generator Name: Allison Abrasives, Incorporated
Address: 163 Industry Road, Lancaster, KY 40444
Phone: (606)792-3033 County: Garrard
- B. Hauler Name: Hal-Co Sanitation
Address: 700 Dillehay Street
Danville, KY 40422 Phone: (606)236-7700
- C. Disposal Site Name: Tri-K Landfill
Permit #: 069.04 County: Lincoln
- D. Waste Information
Process waste generated from abrasive
1. Waste Name: cut-off wheel manufacturing
2. Waste Process: _____
3. Waste State: ☒ Solid ☒ Semi-Solid ☐ Liquid
4. Waste Amount:
_____ Gallons ☐ per year ☐ per month ☐ one time only
1500 Cubic Yards ☒ per year ☐ per month ☐ one time only
_____ 55-gal. drums ☐ per year ☐ per month ☐ one time only
- E. Disposal Information
1. Waste Pretreatment: ☐ None
☒ (Description) All raw material waste are cured at 350°F to drive off free contaminants
2. Type of Container:
☒ Metal Drum ☒ Fiber Drum ☒ Plastic Bag ☐ Paper Bag ☒ Loose
☐ Other _____
3. Disposal Method:
☐ Buried in container ☒ Co-mixed with garbage
☐ Other _____

F. Certification

I certify that the above is true and correct.

L. G. Osborne, Plant Manager
Signature of Authorized Agent and Title

January 25, 1989
Date

GENERATOR: ALLISON ABRASIVES, INC. PAGE 4 OF 4
WASTE NAME: WASTE GENERATED FROM ABRASIVE GRAINS DATE: 5/24/89

V. DIVISION OF WASTE MANAGEMENT FINAL DETERMINATION

A. GENERAL INFORMATION:

1. Landfill Name: TRI-K LANDFILL 2. County: LINCOLN
3. Landfill Permit #: 069.04 4. Expires: 9-30-90

B. APPROVAL:

On behalf of the Director of the Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, the Division modifies the landfill permit cited in Section IVA of this application to allow disposal of the waste described herein. The Division reserves the right to modify or revoke this approval. This approval is invalid in the absence of a valid permit or if disposal is not in accordance with description herein or conditions described below.

Date: MAY 24, 1989

Shelby C. Jett

Solid Waste Branch Manager
Division of Waste Management

C. DENIAL:

On behalf of the Director of the Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, the Division of Waste Management rejects this application for the reason(s) stated below:

Date: _____

Solid Waste Branch Manager
Division of Waste Management

SOLID WASTE BRANCH ONLY:

RECEIVED
APR 11 1989

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

RUSH
FOR INTERNAL USE ONLY:

Date Logged: 4-26-89 524

Receipt Number: 007128

Date Approved/Denied: 5/24/89

County: _____

DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

APPLICATION TO ACCEPT AN ADDITIONAL WASTE STREAM

(Prepare an individual application for each waste stream)

☒ NEW
☐ UPDATE

I. WASTE GENERATOR INFORMATION

A. GENERATOR IDENTIFICATION:

1. Name: Allison Abrasives, Inc.
2. Mailing Address: Box 192, Lancaster, KY 40444
3. Address Where Waste Generated: 163 Industry Road, Lancaster, KY 40444
4. Contact Person: Lynn Osborne 5. Telephone: 606/792-3033

B. WASTE DESCRIPTION:

1. Waste Name: Process waste generated from abrasive cut-off wheel manufacture
Describe source of the waste including industrial process: Waste generated from abrasive grains, fillers, and resins during the manufacture of cut-off wheels.
2. Is the waste hazardous under 401 KAR 31:010, Section 3, which includes the characteristics of 401 KAR 31:030 and the lists of 401 KAR 31:040? ☐ Yes ☒ No (If yes, contact your local Division of Waste Management Field Office for further assistance. See instructions for locations and telephone numbers.)
3. Is the waste an "exempt" hazardous waste under the regulatory cites in the Instructions? ☐ Yes ☒ No
Regulatory Cite: _____
4. Waste Condition Upon Generation: ☐ Solid ☒ Semi-solid ☐ Liquid ☐ Other Cured dust from dust collectors
5. Waste Treatment Description: Uncured waste material is cured by heat to drive off any free emissions. Dust emissions have been cured during manufacturing process.
6. Disposal Site Name: Tri-K Landfill 7. Permit # 069.04
8. Waste Condition Upon Disposal: ☐ Solid ☒ Semi-solid ☐ Liquid ☐ Other Dust
9. Waste Amount: 55-gal. drums or 1500 Cubic Yards (Note: 1 cubic yard = 202 gallons)
10. Frequency: ☐ Per Month ☒ Per Year ☐ One-Time Only

C. CONTAINER TYPE(See Instructions):

- ☐ Paper bag ☐ Fiber drum or cardboard box ☐ Metal or plastic drum
- ☐ Plastic bag ☐ Double bagged in container ☐ Other (specify) _____
- ☒ Bulk ☒ Mixed with plant trash _____

D. FEE: Check payable to "KENTUCKY STATE TREASURER." (MAIL CHECK DIRECTLY TO SOLID WASTE BRANCH, DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KENTUCKY 40601)

Check for \$50.00 # CK No. 17973

E. SOLID WASTE GENERATOR CERTIFICATION:

I certify that the information set forth in Section I pertaining to the waste is true and correct and that the waste is not regulated as a hazardous waste under 401 KAR Chapter 31 which requires storage, treatment or disposal at a hazardous waste facility under 401 KAR Chapters 32 through 40. I understand that failure to properly manage a hazardous waste could lead to possible civil and criminal penalties under KRS Chapter 224 or the Resource Conservation and Recovery Act of 1976, (Public Law 94-580), as amended.

Signature of Authorized Agent: L. Osborne Date: 3/28/89

Name of Authorized Agent (typed or printed): Lynn Osborne Title: Plant Manager

A. LABORATORY IDENTIFICATION:

1. Laboratory Name: T.M. REGAN, INC.
2. Mailing Address: 377 Waller Avenue, Lexington, Kentucky 40504
3. Contact Person: Charles E. Fouser 4. Telephone: 606-254-3831

B. SAMPLE COLLECTION:

1. Sampler Name: _____
2. Company: _____

C. SAMPLE CONTAINER:

1. Container Type: ☐ Glass ☒ Plastic ☐ Other (explain) _____
2. Sample Type: ☐ Composite ☒ Grab ☐ Other (explain) _____
3. Size of Container: One gallon
4. Preservative: NONE

D. WASTE CHARACTERISTICS:

1. Does the waste exhibit the characteristic of a hazardous waste as described in 401 KAR 31:030:

[illegible]

ANALYSIS

Ignitability ☐ ☒ Flashpoint > 140 °F

Corrosivity ☐ ☒ pH 9.6

activity ☐ ☒ _____ mg/kg ☐ H₂S ☐ HCN

EP Toxicity ☐ ☒ Contaminant(s) _____ mg/l

2. Is the waste characteristically hazardous? ☐ Yes ☒ No

3. Waste passed paint filter test? N/A ☒ Yes ☐ No 4. Solids Content: NO FREE LIQUIDS

E. LABORATORY CERTIFICATION:

I certify the above results are true and correct and analyses were conducted in accordance with EPA publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."

Signature of Laboratory Analyst: Lee J. Jarama Date: 3-25-01

ATTACH LABORATORY RESULTS

F. MATERIAL SAFETY DATA SHEET:

1. Attached ☐ Yes ☐ No

III. TRANSPORTER INFORMATION

A. HAULER IDENTIFICATION:

1. Hauler Name: Hal-Co Sanitation
2. Mailing Address: 700 Dillehay Street, Danville, KY 40422
3. Contact Person: Hal Stevens 4. Telephone: 606/236-7700

B. SECONDARY HAULER IDENTIFICATION:

1. Author Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

GENERATOR: Allison Abrasives, Inc.

PAGE 3 OF 3

WASTE NAME: Baghouse and Kiln Waste

DATE:

IV. LANDFILL INFORMATION

A. DISPOSAL SITE IDENTIFICATION:

1. Landfill Name: Tri-K Landfill 2. Permit #: 069.04
3. Mailing Address: 3445 Skyline Drive, Stanford, KY 40484-9437
4. Contact Person: Dale Kirkpatrick 5. Telephone: 606/365-7806

B. INSTRUCTIONS TO GENERATOR:

1. Time of Day Waste is to be Delivered: _____
2. Special handling' requirements: _____

3. Comments:

C. DISPOSAL METHOD:

- ☐ Bury in container ☒ Co-mix with garbage ☐ Bury at bottom of lift ☐ Per EPA asbestos procedure
☐ Other _____

D. LANDFILL CERTIFICATION:

I certify that I ☐ will ~~not~~ ☒ If approved, will accept the waste described in Section I at the landfill named in Section IV.A. I propose to use the method of disposal described in Section IV. C. above. Failure to use the described, approved procedure may constitute illegal disposal. The waste to be received under this permit modification is compatible to the above mentioned landfill operation.

Signature of Authorized Agent for Landfill: Richard Beggs

Date: Mar 28 1987

Name of Authorized Agent (Typed or Printed): DALE KIRKPATRICK

Title: OWNER



QUALITY CONTROL NO.: 173-214

T. M. REGAN, INC.

LABORATORY SERVICES

TO: Allison Abrasives
163 Industry Road
Lancaster, Kentucky 40444

SAMPLE SOURCE Baghouse and Kiln Waste
Sample taken by client

Attn: Mr. Len Osbourne

NO. OF SAMPLES 1

DATE/TIME RECEIVED: February 14, 1989

TYPE SAMPLE Grab

DATE OF REPORT March 23, 1989

CHARACTERISTICS OF HAZARDOUS WASTE PART 261 SUBPART C

% Total Solids (% by wt)	99.8
% Total Volatile Solids (% by wt)	8.55
Ignitability (°F)	>140
Corrosivity - pH	9.6
Reactivity	Nonreactive

EP TOXICITY

EXTRACT (mg/L)

Arsenic	<0.005
Barium	<0.05
Cadmium	<0.01
Chromium	0.01
Lead	0.02
Mercury	<0.0005
Selenium	<0.005
Silver	<0.01

***** FAX TRANSMITTAL MEMO *****

TO: George Gilbert

DEPT: Ext. 216 FAX #:

FROM: Lynn Osbourne PHONE:

CO: Allison Abrasives FAX #: (606) 792-3033

Post-it brand fax transmittal memo 7671

Pls. call Mr. Gilbert upon receiving

NO. OF
PAGES
1

REMARKS

1. Laboratory and personnel certified by Commonwealth of Kentucky, Department for Natural Resources and Environmental Protection for compliance with the National Primary Drinking Water Regulations, and for the testing of soil and minepolls. Laboratory Identification No. 00028.
2. Analyses per Standard Methods — latest revision or EPA Methods, March 1979 or ASTM latest edition.
3. On samples made and/or furnished by the client, the date of sample taking and the date sample received are the same unless otherwise known and noted.
4. Quality control program maintained in accordance with U.S. Environmental Protection Agency regulations and guidelines.
5. Inquiries about this report should include your quality control number.

CODES USED

N/A — considered but non-applicable
(—) or blank — not analyzed
* — information provided by client
On Site — information determined at sampling site
mg/L — milligrams per liter
< — less than
> — greater than

By Lee J. Lawrence
Certified Chemist

π



Simmons Casket Company

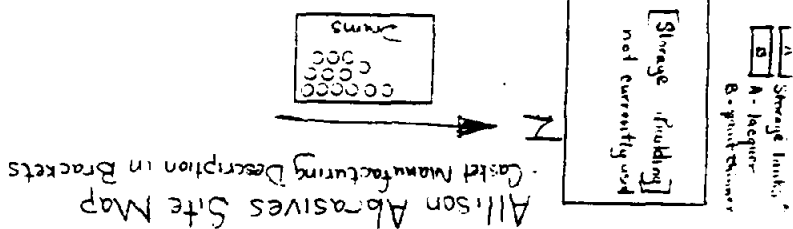
On October 27, 1989, Randy Thomas and I conducted a preliminary assessment site visit at the former Simmons Casket Company site (now called Allison Abrasives). We were shown around the facility by Lyn Osborn and an employee who also had worked for the Simmons Company.

The site had been renovated by Allison Abrasives who now produces abrasive wheels at the facility.

Brief History of the Site:

1. Operations ceased in 1984
2. In 1987 the site was sold to Allison Abrasives and renovated.
3. October 1987 - operations began again.

On the east side of the facility leaking drums and stained soil was discovered.



* The Underground Storage Tanks were removed in 1987.

Scale-1 = 50'

7

APPENDIX C

WEATHER DATA FROM SELECTED LOCAL AND DISTANT STATIONS

MEAN TEMPERATURES	RICHMOND KY.	LANCASTER KY.	LEXINGTON KY.	LOUISVILLE KY.	COLUMBUS OHIO	CLEVELAND OHIO	CHICAGO ILL
January	36.6	34.2	34.5	34.9	30.1	29.8	27.7
February	37.6	36.9	35.8	37.2	27.7	25.5	28.8
March	44.7	44.7	43.2	45.6	41.1	37.1	33.7
April	55.5	55.7	54.4	56.0	53.6	48.8	49.1
May	64.9	64.6	64.5	65.3	63.4	60.7	62.7
June	73.1	72.5	73.6	74.2	74.4	72.2	69.0
July	76.3	75.4	77.4	77.9	74.4	72.2	72.1
August	75.4	74.5	76.0	76.1	76.2	67.5	67.7
September	69.8	68.7	69.3	70.2	65.0	63.5	63.3
October	59.1	58.2	58.1	58.6	51.1	49.2	48.0
November	46.0	45.6	44.7	45.7	45.1	44.2	41.4
December	37.6	36.6	35.9	36.9	33.9	32.2	24.7
PRECIPITATION							
January	5.05	4.28	4.94	4.10	1.82	1.45	1.08
February	3.98	4.06	3.42	2.99	1.68	1.49	0.52
March	4.91	4.98	4.75	4.67	9.59	5.21	3.45
April	3.96	3.95	4.04	4.01	6.36	4.87	5.22
May	3.86	4.09	3.85	3.93	1.95	2.06	2.26
June	4.83	4.74	4.72	4.06	5.71	2.06	2.86
July	5.14	4.84	3.98	3.08	2.97	3.37	4.23
August	4.09	3.53	3.21	3.06	3.19	3.82	1.95
September	2.95	3.12	2.80	2.70	1.66	0.74	3.95
October	2.11	1.89	2.28	2.45	0.38	0.78	0.16
November	3.42	3.44	3.29	3.12	1.81	0.92	2.90
December	3.60	3.48	3.45	3.30	4.09	2.67	1.51

3.86

KY0032

SOIL INTERPRETATIONS RECORD

LOWELL SERIES

MLRA(S): 121, 126, 12R
 REV. GEK, 6-79
 TYPIC HAPLUDALFS, FINE, MIXED, MESIC

THE LOWELL SERIES CONSISTS OF DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN RESIDUAL OF INTERBEDDED LIMESTONE AND CALCAREOUS SHALE AND SILTSTONE. IN A REPRESENTATIVE PROFILE, THE SURFACE LAYER IS BROWN SILT LOAM 11 INCHES THICK. THE UPPER 30 INCHES OF SUBSOIL IS STRONG BROWN, VERY FIRM SILTY CLAY AND CLAY. THE LOWER 12 INCHES OF SUBSOIL IS MOTTLED YELLOWISH BROWN AND LIGHT GRAY, VERY FIRM CLAY. HARD LIMESTONE BEDROCK IS AT 53 INCHES. SLOPES RANGE FROM 2 TO 65 PERCENT.

ESTIMATED SOIL PROPERTIES (A)											
DEPTH (IN.)	USDA TEXTURE	UNIFIED	AASHTO	FRACTURE PERCENT OF MATERIAL LESS THAN 3" PASSING SIEVE NO. 100				LIQUID PLAS-			
				100	10	20	40	LIMIT	PLAS-	INDEX	
0-11	SIL	ML, CL, CL-ML	A-4	0	100	95-100	90-100	85-100	22-32	4-10	
0-11	SICL	CL	A-6, A-7	0	100	95-100	90-100	85-100	34-42	15-22	
11-23	SIC, C, SICL	CL, CH, MH	A-7, A-6	0	100	95-100	90-100	85-100	35-65	15-32	
23-53	SIC	CH, MH, CL	A-7	0-20	195-100	90-100	85-100	75-100	45-75	20-40	
53	UWR										
DEPTH (IN.)	CLAY (PCT)	POIST (G/G)	ELUK (IN/HR)	PERMA- WATER CAPACITY (IN/IN)	AVAILABLE SOIL (PH)	SALINITY (MMHOS/CM)	SHRINK- SWELL POTENTIAL (K)	TEROSTION FACTOR (PCT)	WINE SIEVE (PCT)	ORGANIC MATTER (PCT)	CORROSIVITY STEEL CONCRETE
0-11	12-27	1.20-1.40	0.6-2.0	0.18-0.23	14.5-6.5	-	LOW	1.37	3	-	1-4
0-11	27-40	1.20-1.40	0.6-2.0	0.18-0.23	14.5-6.5	-	LOW	1.37	3	-	1-4
11-23	35-60	1.30-1.60	0.2-2.0	0.13-0.19	14.5-6.5	-	MODERATE	1.28			
23-53	40-60	1.50-1.70	0.2-0.6	0.12-0.17	15.1-7.8	-	MODERATE	1.28			
53											
FLOODING											
HIGH WATER TABLE											
CEMENTED PAV. BEDROCK											
SUBSIDENCE											
IMPROPER FROST ACTION											
FREQUENCY	DURATION	MONTHS	DEPTH (FT)	KIND	MONTHS	DEPTH (IN)	HARDNESS (IN)	DEPTH (IN)	HARDNESS (IN)	DEPTH (IN)	HARDNESS (IN)
NONE			26.0					240	HARD		

SANITARY FACILITIES (B)						CONSTRUCTION MATERIAL (B)					
SEPTIC TANK	2-15%: SEVERE-PERCS SLOWLY					2-25%: POOR-LOW STRENGTH					
ABSORPTION FIELDS	15+%: SEVERE-PERCS SLOWLY, SLOPE					25+%: POOR-LOW STRENGTH, SLOPE					
SEWAGE LAGOON AREAS	2-7%: MODERATE-SEEPAGE, DEPTH TO ROCK, SLOPE					IMPROBABLE-EXCESS FINES					
	7+%: SEVERE-SLOPE										
SANITARY LANDFILL (TRENCH)	2-15%: SEVERE-DEPTH TO ROCK, TOO CLAYEY					IMPROBABLE-EXCESS FINES					
	15+%: SEVERE-DEPTH TO ROCK, SLOPE, TOO CLAYEY										
SANITARY LANDFILL (AREA)	2-8%: MODERATE-DEPTH TO ROCK					2-15%: POOR-THIN LAYER					
	8-15%: MODERATE-DEPTH TO ROCK, SLOPE					15+%: POOR-THIN LAYER, SLOPE					
	15+%: SEVERE-SLOPE										
DAILY COVER FOR LANDFILL	2-15%: POOR-TOO CLAYEY, HARD TO PACK										
	15+%: POOR-TOO CLAYEY, HARD TO PACK, SLOPE										

BUILDING SITE DEVELOPMENT (B)						WATER MANAGEMENT (B)					
SHALLOW EXCAVATIONS	2-8%: MODERATE-DEPTH TO ROCK, TOO CLAYEY					SEVERE-HARD TO PACK					
	8-15%: MODERATE-DEPTH TO ROCK, TOO CLAYEY, SLOPE										
	15+%: SEVERE-SLOPE										
DWELLINGS WITHOUT BASEMENTS	2-8%: MODERATE-SHRINK-SWELL					SEVERE-NO WATER					
	8-15%: MODERATE-SHRINK-SWELL, SLOPE										
	15+%: SEVERE-SLOPE										
DWELLINGS WITH BASEMENTS	2-8%: MODERATE-DEPTH TO ROCK, SHRINK-SWELL					DEEP TO WATER					
	8-15%: MODERATE-DEPTH TO ROCK, SLOPE, SHRINK-SWELL										
	15+%: SEVERE-SLOPE										
SMALL COMMERCIAL BUILDINGS	2-8%: MODERATE-SHRINK-SWELL					2-3%: ERODES EASILY					
	4-8%: MODERATE-SHRINK-SWELL, SLOPE					3+%: SLOPE, ERODES EASILY					
	8+%: SEVERE-SLOPE										
LOCAL ROADS AND STREETS	2-15%: SEVERE-LOW STRENGTH					2-8%: ERODES EASILY					
	15+%: SEVERE-LOW STRENGTH, SLOPE					8+%: SLOPE, ERODES EASILY					
LAWNS, LANDSCAPING AND GOLF FAIRWAYS	2-8%: SLIGHT					2-8%: ERODES EASILY					
	8-15%: MODERATE-SLOPE					8+%: SLOPE, ERODES EASILY					
	15+%: SEVERE-SLOPE										

REGIONAL INTERPRETATIONS

RECREATIONAL DEVELOPMENT (B)

2-8%: MODERATE-PERCS SLOWLY	2-8%: MODERATE-SLOPE, PERCS SLOWLY
8-15%: MODERATE-SLOPE, PERCS SLOWLY	6+%: SEVERE-SLOPE
CAMP AREAS: 15+%: SEVERE-SLOPE	PLAYGROUNDS
2-8%: MODERATE-PERCS SLOWLY	2-8%: SLIGHT
8-15%: MODERATE-SLOPE, PERCS SLOWLY	8-25%: SEVERE-ERODES EASILY
PICNIC AREAS: 15+%: SEVERE-SLOPE	25+%: SEVERE-SLOPE, ERODES EASILY
	AND
	TRAILS

CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE (HIGH LEVEL MANAGEMENT)

CLASS- DETERMINING PHASE	CAP- BILITY	CORN	OATS	WHEAT	TOBACCO	SOYBEANS	GRASS- LEGUME HAY	PASTURE
	(BU)	(BU)	(BL)	(LBS)	(BU)	(TONS)	(AUM)	
12-6% SIL	2F	110	65	40	2900	35	4.0	8.0
14-12% SIL	3E	100	60	35	2600	30	4.0	8.0
12-20% SIL	4E	85	55	30	2300	-	3.5	7.0
20-30% SIL	6E	-	-	-	-	-	-	6.0
12-6% SICL, SEV ER	3E	100	60	35	2400	30	3.5	7.0
14-12% SICL, SEV ER	4E	85	55	30	2150	25	3.0	6.0
12-20% SICL, SEV ER	6E	-	-	-	-	-	-	5.0
20-30% SICL, SEV ER	7F	-	-	-	-	-	-	-
30-65%	7E	-	-	-	-	-	-	-

WOODLAND SUITABILITY (C)

CLASS- DETERMINING PHASE	ORD SYM	MANAGEMENT PROBLEMS					POTENTIAL PRODUCTIVITY			
		EROSTION	EQUIP.	SEEDLING	WINDTH.	PLANT	COMMON TREES		SITE	TREES TO PLANT
		HAZARD	LIMIT	MORT.Y.	HAZARD	COMPET.			INDEX	
12-15%	12C	SLIGHT	SLIGHT	SLIGHT	SLIGHT	MODERATE	NORTHERN RED OAK	170		YELLOW-POPLAR
15-35%	12C	MODERATE	MODERATE	SLIGHT	SLIGHT	MODERATE	YELLOW-POPLAR	190		EASTERN WHITE PINE
35+%	12C	SEVERE	SEVERE	SLIGHT	SLIGHT	MODERATE	SHORTLEAF PINE	190		SHORTLEAF PINE
							VIRGINIA PINE	180		VIRGINIA PINE
										LOBLOLLY PINE
12-15% SEV ER	13C	SLIGHT	MODERATE	MODERATE	SLIGHT	SLIGHT	NORTHERN RED OAK	160		VIRGINIA PINE
15-35% SEV ER	13C	MODERATE	SEVERE	MODERATE	SLIGHT	SLIGHT	SHORTLEAF PINE	170		SHORTLEAF PINE
35+% SEV ER	13C	SEVERE	SEVERE	MODERATE	SLIGHT	SLIGHT	VIRGINIA PINE	165		LOBLOLLY PINE
</										

WINDBREAKS

CLASS-DETERMINING PHASE	SPECIES	IM1	SPECIES	IM1	SPECIES	IM1	SPECIES	IM1
ALL	HONEYLOCUST	140	EASTERN WHITE PINE	138	NORWAY SPRUCE	130	EASTERN HEMLOCK	125
	EUROPEAN BURNINGBUSH	151	BLACKHAW	114	LATE LILAC	113	AMUR HONEYSUCKLE	111
	SHADLOW SERVICEBERRY	19	AMER CRANBERRYBUSH	19	AUTUMN-OLIVE	18	POCKORANGE	17

WILDLIFE HABITAT SUITABILITY (C)

G

ENDANGERED, THREATENED, AND SPECIAL CONCERN SPECIES
LOCATED WITHIN A 4-MILE RADIUS OF THE SIMMONS CASKET
COMPANY SITE (ALIAS ALLISON ABRASIVES, INC.)

SCIENTIFIC NAME	COMMON NAME	STATE STATUS	FEDERAL STATUS
<i>Simpsonia ambigua</i>	Salamander mussel	Threatened	Category 2

SOURCE: Kentucky Nature Preserve Commission. Natural Heritage
Data Base. 1989. 407 Broadway, Frankfort, Kentucky.

REGION: 04
STATE : KY

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

5
RUN DATE: 02/24/87
RUN TIME: 14:11:52

M.2 - SITE MAINTENANCE FORM

		* ACTION: _	*
EPA ID : KYD050074889			
SITE NAME: SIMMONS CASKET COMPANY	SOURCE: R	* _____	*
STREET : US 27 S INDS BLVD	CONG DIST: 05	* _____	*
CITY : LANCASTER	ZIP: 40444	* _____	*
CNTY NAME: GARRARD	CNTY CODE : 079	* _____	*
LATITUDE : 37/36/35.0	LONGITUDE : 084/34/45.0	* __/__/__.	*
LL-SOURCE: R	LL-ACCURACY:	* _	*
SMSA :	HYDRO UNIT: 05100205	* _____	*
INVENTORY IND: Y	REMEDIAL IND: Y	REMOVAL IND: N	FED FAC IND: N
NPL IND: N	NPL LISTING DATE:	NPL DELISTING DATE:	
SITE/SPILL IDS:			
RPM NAME:	RPM PHONE: - -	* _____	*
SITE CLASSIFICATION:	SITE APPROACH:	* _	*
DIOXIN TIER:	REG FLD1:	REG FLD2:	
RESP TERM: PENDING ()	NO FURTHER ACTION ()	* PENDING ()	NO FURTHER ACTION ()
ENF DISP: NO VIABLE RESP PARTY ()	VOLUNTARY RESPONSE ()	* _	
ENFORCED RESPONSE ()	COST RECOVERY ()	* _	
SITE DESCRIPTION:			
	* _____		
	* _____		
	* _____		
	* _____		

REGION: 04
STATE : KY

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

2: 6
RUN DATE: 02/24/87
RUN TIME: 14:11:52

M.2 - ALIAS/ALIAS LOCATION MAINTENANCE FORM

SITE: SIMMONS CASKET COMPANY		* ACTION: _		*
EPA ID: KYD050074889	ALIAS SEQ NO: 01			
ALIAS NAME: SIMMONS CASKET CO	SOURCE: R	* _____	-	*
ALIAS LOCATION		* ACTION: _		*
CONTIGUOUS PORTION OF SITE? C	FED FAC IND: N	* _	-	*
STREET : OFF KY 39	CONG DIST : 05	* _____	_____	*
CITY : LANCASTER	ST: KY ZIP: 40444	* _____	_____	*
CNTY NAME: GARRARD	CNTY CODE: 079	* _____	_____	*
LATITUDE : 37/37/06.0	LONGITUDE : 084/34/30.0	* _/_/_	_/_/_	*
LL-SOURCE: G	LL-ACCURACY:	* _	-	*
SMSA :	HYDRO UNIT: 05100205	* _____	_____	*
ALIAS DESCRIPTION:				
* _____		*		
* _____		*		
* _____		*		
* _____		*		

REGION: 04
STATE : KY

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

JE: 7
RUN DATE: 02/24/87
RUN TIME: 14:11:52

M.2 - PROGRAM MAINTENANCE FORM

SITE: SIMMONS CASKET COMPANY

EPA ID: KYD050074889 PROGRAM CODE: H01 PROGRAM TYPE:

PROGRAM QUALIFIER: ALIAS LINK :

PROGRAM NAME: SITE EVALUATION

DESCRIPTION:

* ACTION: _

*

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REGION: 04
STATE : KY

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

.E: 8
RUN DATE: 02/24/87
RUN TIME: 14:11:52

M.2 - EVENT MAINTENANCE FORM

SITE: SIMMONS CASKET COMPANY
PROGRAM: SITE EVALUATION

EPA ID: KYD050074889 PROGRAM CODE: H01

EVENT TYPE: DS1

FMS CODE: EVENT QUALIFIER :

EVENT LEAD: E

EVENT NAME: DISCOVERY

STATUS:

DESCRIPTION:

* ACTION: _

* _ _ _ _ _
* _ _ _ _ _
* _ _ _ _ _
* _ _ _ _ _

ORIGINAL

CURRENT

ACTUAL

START:

START:

START:

* _/_/_ _/_/_ _/_/_ *

COMP :

COMP :

COMP : 08/01/80

* _/_/_ _/_/_ _/_/_ *

HQ COMMENT:

* _ _ _ _ _

RG COMMENT:

* _ _ _ _ _

COOP AGR #

AMENDMENT #

STATUS

STATE %

0

* _ _ _ _ _

REGION: 04
STATE : KY

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

1 2 9
RUN DATE: 02/24/87
RUN TIME: 14:11:52

M.2 - EVENT MAINTENANCE FORM

SITE: SIMMONS CASKET COMPANY
PROGRAM: SITE EVALUATION

EPA ID: KYD050074889 PROGRAM CODE: H01

EVENT TYPE: PA1

FMS CODE: EVENT QUALIFIER :

EVENT LEAD: S

EVENT NAME: PRELIMINARY ASSESSMENT

STATUS:

DESCRIPTION:

* ACTION: -

* _ _ _ _ _ *

* _ _ _ _ _ *

* _ _ _ _ _ *

* _ _ _ _ _ *

* _ _ _ _ _ *

ORIGINAL

CURRENT

ACTUAL

START:

START:

START: 04/01/84

* _/_/_/_ _/_/_/_ _/_/_/_ *

COMP :

COMP :

COMP : 08/01/84

* _/_/_/_ _/_/_/_ _/_/_/_ *

HQ COMMENT:

* _ _ _ _ _ *

RG COMMENT:

* _ _ _ _ _ *

COOP AGR #

AMENDMENT #

STATUS

STATE %

0

* _ _ _ _ _ *

REGION: 04
STATE : KY

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

10
RUN DATE: 02/24/87
RUN TIME: 14:11:52

M.2 - COMMENT MAINTENANCE FORM

SITE: SIMMONS CASKET COMPANY

EPA ID: KYD050074889

COM

NO COMMENT

ACTION

001 NO PART A ON FILE

* -

002 KYS000001085-PAINT THINNER WASTE WA

* -

S STORED IN 55 GALLON DRUMS,

* -

003 PUMPED INTO TANK TRUCK ONCE OR TWIC

* -

E PER YEAR, TRANSPORTED TO A

* -

004 RECYCLING FACILITY TO RECLAIM THE S

* -

OLVENTS. PAINT SLUDGE F018

* -

005 RENDERED NEUTRAL AND TRANSPORTED TO

* -

CITY OWNED LANDFILL.

* -

006 ESTIMATED 2,000 GALLONS PER YEAR. D

* -

ATES OF WASTE HANDLING FROM 1965

* -

007 TO 1981. CONTACT: MADDEN, FRANK B.

* -

606-792-2101

* -

CHARLOTTE E. BALDWIN
SECRETARY



*No further action
5/3/84 PWT*

MARTHA LAYNE COLLINS
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FORT BOONE PLAZA
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

MEMORANDUM

TO: Caroline P. Haight, Manager
Permit Review Branch

FROM: Barry Burrus, Chief
Uncontrolled Sites Section *BB*

SUBJECT: Uncontrolled Site Close-out for Simmons Casket Co. Site
Garrard County

DATE: March 21, 1984

Simmons Casket Co. (now the York Casket Co.) is a manufacturer of wooden and metal caskets. The wastes produced by this facility include solvent waste which are transported to Reclaimed Energy, Inc., Connersville, Indiana by a permitted transporter and non-hazardous paint sludge which is disposed of in a permitted landfill.

Prior to September 23, 1982, this facility was regulated by Part "A" of the Federal Hazardous Waste Facility permit application. This accounts for their inclusion on the ERRIS list. On this date the KYNREPC's Division of Waste Management, acting under RCRA Phase I Interim Authorization, withdrew their Part "A". Investigation of the Division of Waste files has determined that no problems have existed with this company's handling of hazardous waste which would qualify them as an uncontrolled site.

In consideration of the aforementioned investigation, I am recommending no further action to be taken on this site and further recommend that it be removed from the uncontrolled site list.

BB/JC/las

cc: Hannah Leonard
Bob Prewitt
File
EPA



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
KY D050074889

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Simmons Casket Co.		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER P.O. Box 42			
03 CITY Lancaster	04 STATE KY	05 ZIP CODE 40444	06 COUNTY Garrard	07 COUNTY CODE 40	08 CONG DIST
09 COORDINATES LATITUDE 37° 36' 35".0 LONGITUDE -84° 34' 45".0					
10 DIRECTIONS TO SITE (Starting from nearest public road) Site is located on Hwy #39 & 27 south which is the main highway running north and south through the town of Lancaster, Kentucky. To reach the site, travel approximately 7 mile south on Hwy #39 & 27 from its intersection with State Route 52 at the center of town.					

III. RESPONSIBLE PARTIES

01 OWNER (If known) Simmons Universal		02 STREET (Business, mailing, residential) 372 Washington Street			
03 CITY Wellesley Hills	04 STATE MA	05 ZIP CODE 02181	06 TELEPHONE NUMBER ()		
07 OPERATOR (If known and different from owner) York Casket Co (formerly Simmons Casket Co)		08 STREET (Business, mailing, residential) P.O. Box 42			
09 CITY Lancaster	10 STATE KY	11 ZIP CODE 40444	12 TELEPHONE NUMBER (606) 792-2101		
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: _____ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: _____ MONTH DAY YEAR ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 11/23/83 <input type="checkbox"/> NO		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION 1965 To Date BEGINNING YEAR ENDING YEAR <input type="checkbox"/> UNKNOWN			
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED Paint thinner waste & Solvent waste transported to Reclaimed Energy Inc., Connersville, Ind. for recycling by permitted transporter: Oil Service Co. Route 3 Petty Lane, Columbia, Tenn. 38401 Paint Sludge; non-hazardous disposed of in permitted landfill.					

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

N/A Please refer to Section IV, Part 3 of form.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents) <input type="checkbox"/> A. HIGH (Inspection required promptly) <input type="checkbox"/> B. MEDIUM (Inspection required) <input type="checkbox"/> C. LOW (Inspect on time available basis) <input checked="" type="checkbox"/> D. NONE (No further action needed, complete current disposition form)			
--	--	--	--

VI. INFORMATION AVAILABLE FROM

01 CONTACT Hannah Leonard (Field Supervisor)		02 OF (Agency/Organization) Env. Protection Div. of Waste Mgmt (Frankfort)		03 TELEPHONE NUMBER (502) 564-6716	
04 PERSON RESPONSIBLE FOR ASSESSMENT Jim Childers (Geologist)		05 AGENCY Env. Protection Div. of Waste Mgmt		06 ORGANIZATION (502) 564-6716	
		07 TELEPHONE NUMBER (502) 564-6716		08 DATE 3/20/84 MONTH DAY YEAR	



☐ I. HIGHLY VOLATILE
☐ J. EXPLOSIVE
☐ K. REACTIVE
☐ L. INCOMPATIBLE
☐ M. NOT APPLICABLE



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
KY D050074089

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: _____
(Acres)

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
KY D050074889

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (include name(s) of species)

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: N/A

IV. COMMENTS

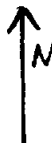
Prior to September 23, 1982, this facility was regulated by part "A" of the Federal Hazardous Waste Facility permit application. This accounts for their inclusion on the ERLS list. On this date the KYNREPC's Division of waste management, acting under RCRA Phase I Interim Authorization, withdrew their part "A". No problems have been detected in their handling of hazardous waste which would qualify the facility as an uncontrolled site.

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analyses, reports)

KYNREPC's Division of waste management files

ATES
HE INTERIOR
SURVEY

STATE OF KENTUCKY
KENTUCKY GEOLOGICAL SUR
UNIVERSITY OF KENTUCK



DANVILLE 10 MI.
HEDGEVILLE 4.6 MI.

35'

LEXINGTON 35 MI.
BRYANTSVILLE 8.7 MI.

(BUCKEYE)





POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION

SITE NUMBER (to be assigned by HQ)

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II (Preliminary Assessment). File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency (EN-335); 401 M St., SW; Washington, DC 20460.

KYD050074889 GARRARD
SIMMONS CASKET CO
OFF KY 39
LANCASTER
MADDEN, FRANK B.

KY 40444
6067922101

ATION

ET (or other identifier)

FE

E. ZIP CODE

F. COUNTY NAME

2. TELEPHONE NUMBER

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE ☐ 6. UNKNOWN

"103-C NOTIFICATION"
CARL SCHROEDER
PHONE: 502-564-6716

DATE: 810608

K. DATE IDENTIFIED
(mo., day, & yr.)

2. TELEPHONE NUMBER

plete this section last)

A. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☒ 4. NONE ☐ 5. UNKNOWN

B. RECOMMENDATION

☒ 1. NO ACTION NEEDED (no hazard)

☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:

☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:

b. WILL BE PERFORMED BY:

b. WILL BE PERFORMED BY:

☐ 4. SITE INSPECTION NEEDED (low priority)

C. PREPARER INFORMATION

1. NAME

2. TELEPHONE NUMBER

3. DATE (mo., day, & yr.)

III. SITE INFORMATION

A. SITE STATUS

☐ 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

☐ 2. INACTIVE (Those sites which no longer receive wastes.)

☐ 3. OTHER (specify):
(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

☐ 1. NO

☐ 2. YES (specify generator's four-digit SIC Code):

C. AREA OF SITE (in acres)

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES

1. LATITUDE (deg.-min.-sec.)

2. LONGITUDE (deg.-min.-sec.)

E. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO ☐ 2. YES (specify):

IV. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

<input checked="" type="checkbox"/> A. TRANSPORTER	<input checked="" type="checkbox"/> B. STORER	<input checked="" type="checkbox"/> C. TREATER	<input checked="" type="checkbox"/> D. DISPOSER
1. RAIL	1. PILE	1. FILTRATION	1. LANDFILL
2. SHIP	2. SURFACE IMPOUNDMENT	2. INCINERATION	2. LANDFARM
3. BARGE	3. DRUMS	3. VOLUME REDUCTION	3. OPEN DUMP
4. TRUCK	4. TANK, ABOVE GROUND	4. RECYCLING/RECOVERY	4. SURFACE IMPOUNDMENT
5. PIPELINE	5. TANK, BELOW GROUND	5. CHEM./PHYS. TREATMENT	5. MIDNIGHT DUMPING
6. OTHER (specify):	6. OTHER (specify):	6. BIOLOGICAL TREATMENT	6. INCINERATION
		7. WASTE OIL REPROCESSING	7. UNDERGROUND INJECTION
		8. SOLVENT RECOVERY	8. OTHER (specify):
		9. OTHER (specify):	

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1 UNKNOWN ☐ 2 LIQUID ☐ 3. SOLID ☐ 4 SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1 UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4 RADIOACTIVE ☐ 5 HIGHLY VOLATILE
☐ 6 TOXIC ☐ 7 REACTIVE ☐ 8 INERT ☐ 9 FLAMMABLE
☐ 10. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
<input checked="" type="checkbox"/> (1) PAINT, PIGMENTS	<input checked="" type="checkbox"/> (1) OILY WASTES	<input checked="" type="checkbox"/> (1) HALOGENATED SOLVENTS	<input checked="" type="checkbox"/> (1) ACIDS	<input checked="" type="checkbox"/> (1) FLYASH	<input checked="" type="checkbox"/> (1) LABORATORY PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGENATED SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/ MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
(5) OTHER (specify):			(5) DYES/INKS	(5) NON-FERROUS SMELTING WASTES	(5) OTHER (specify):
			(6) CYANIDE	(6) OTHER (specify):	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (specify):		

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (place in descending order of hazard).

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (specify):				

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

- ☐ 1 NPDES PERMIT ☐ 2 SPCC PLAN ☐ 3. STATE PERMIT (specify): _____
☐ 4. AIR PERMITS ☐ 5. LOCAL PERMIT ☐ 6 RCRA TRANSPORTER
☐ 7 RCRA STORER ☐ 8. RCRA TREATER ☐ 9 RCRA DISPOSER
☐ 10. OTHER (specify): _____

B. IN COMPLIANCE?

- ☐ 1. YES ☐ 2. NO ☐ 3. UNKNOWN

4. WITH RESPECT TO (list regulation name & number): _____

VIII. PAST REGULATORY ACTIONS

- ☐ A. NONE ☐ B. YES (summarize below)

IX. INSPECTION ACTIVITY (past or on-going)

- ☐ A. NONE ☐ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

X. REMEDIAL ACTIVITY (past or on-going)

- ☐ A. NONE ☐ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.

ENVIRONMENTAL PROTECTION AGENCY
NOTIS DATA MANAGEMENT SYSTEM

NOTIS REPORT #

LISTING BY FACILITY
REGION: 04 STATE: KY

PAGE: 103
REPORT DATE: 11/06/81

NOTIFICATION ID NO.	SITE NAME SITE STREET SITE CITY SITE COUNTY EPA SITE ID NO.	REQUIRED NOTIFIER NAME REQUIRED NOTIFIER STREET REQUIRED NOTIFIER CITY (CONTACT NAME/TITLE) (CONTACT PHONE)	NOTIFIER STATUS (PRES ORG, PAST ORG, TRANSPORTER, VOLUNTEER)
------------------------	---	---	---

KYS000001085	SIMMONS CASKET CO OFF KY 39 LACASTER 40444 GARRARD KYD980557128	SIMMONS CASKET CO OFF KY 39 LACASTER (MADDEN, FRANK B. (606-792-2101)	KY 40444
--------------	---	---	----------

RELEASES TO THE ENVIRONMENT: NONE

DATES OF WASTE HANDLING: 1965 TO 1981

WASTE AMOUNT: 5,000 GALLONS AREA: 2,750 SQ FT HAP PRESENT: YES FORM TYPE: 8900-1

NOTIF. POSTMARKED DATE: 81/06/08

SIGNATURE PRESENT: YES

DATE OF LAST UPDATE: 81/10/14

TYPE OF FACILITY

TYPES OF WASTES

SOURCES OF WASTE

AREA ABOVE GROUND

NON-HALOGENATED SOLV & SOLV REC STILL BOTTOMS
NON-HALOGENATED SOLV & SOLV REC STILL BOTTOMS
WASTEWATER TREATMENT SLUDGE FM INDUSTRIAL PAINTING
SOLVENTS

OTHER=(SEE COMMENTS)

COMMENTS

SEQ NO.

SEE FILE
PAINT OPERATION

1
400



POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION IV SITE NUMBER (to be assigned by HQ) KYD050074889

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II (Preliminary Assessment). File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME SIMMONS CASKET CO.		B. STREET (or other identifier)	
C. CITY LANCASTER	D. STATE KY	E. ZIP CODE 40444	F. COUNTY NAME GARRETT
G. OWNER/OPERATOR (if known) 1. NAME SAME AS ABOVE		2. TELEPHONE NUMBER	
H. TYPE OF OWNERSHIP <input type="checkbox"/> 1. FEDERAL <input type="checkbox"/> 2. STATE <input type="checkbox"/> 3. COUNTY <input type="checkbox"/> 4. MUNICIPAL <input checked="" type="checkbox"/> 5. PRIVATE <input type="checkbox"/> 6. UNKNOWN			
I. SITE DESCRIPTION casket manufacturer.			
J. HOW IDENTIFIED (i.e., citizen's complaints, OSHA citations, etc.) CECCLA notification			K. DATE IDENTIFIED (mo., day, & yr.)
L. PRINCIPAL STATE CONTACT 1. NAME HANNAH LEONARD		2. TELEPHONE NUMBER (502) 564-6716	

II. PRELIMINARY ASSESSMENT (complete this section last)

A. APPARENT SERIOUSNESS OF PROBLEM <input type="checkbox"/> 1. HIGH <input type="checkbox"/> 2. MEDIUM <input type="checkbox"/> 3. LOW <input checked="" type="checkbox"/> 4. NONE <input type="checkbox"/> 5. UNKNOWN	
B. RECOMMENDATION <input checked="" type="checkbox"/> 1. NO ACTION NEEDED (no hazard) <input type="checkbox"/> 2. IMMEDIATE SITE INSPECTION NEEDED a. TENTATIVELY SCHEDULED FOR: b. WILL BE PERFORMED BY: <input type="checkbox"/> 3. SITE INSPECTION NEEDED a. TENTATIVELY SCHEDULED FOR: b. WILL BE PERFORMED BY: <input type="checkbox"/> 4. SITE INSPECTION NEEDED (low priority)	

C. PREPARER INFORMATION 1. NAME Hannah Leonard			2. TELEPHONE NUMBER (502) 564-6716	3. DATE (mo., day, & yr.) 5/5/82
--	--	--	---------------------------------------	-------------------------------------

III. SITE INFORMATION

A. SITE STATUS <input checked="" type="checkbox"/> 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.) <input type="checkbox"/> 2. INACTIVE (Those sites which no longer receive wastes.) <input type="checkbox"/> 3. OTHER (specify):	
B. IS GENERATOR ON SITE? <input type="checkbox"/> 1. NO <input checked="" type="checkbox"/> 2. YES (specify generator's four-digit SIC Code): 3995	
C. AREA OF SITE (in acres)	D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES 1. LATITUDE (deg.-min.-sec.) 2. LONGITUDE (deg.-min.-sec.)
E. ARE THERE BUILDINGS ON THE SITE? <input type="checkbox"/> 1. NO <input checked="" type="checkbox"/> 2. YES (specify): plant itself	

IV. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE	<input checked="" type="checkbox"/>	3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

This facility manufactures caskets and generates a nonhazardous paint sludge and some solvent which is shipped off-site.

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1. UNKNOWN ☒ 2. LIQUID ☐ 3. SOLID ☐ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1. UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4. RADIOACTIVE ☐ 5. HIGHLY VOLATILE
☒ 6. TOXIC ☐ 7. REACTIVE ☐ 8. INERT ☒ 9. FLAMMABLE

☐ 10. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

2. Estimate the amount(specify unit of measure)of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE		b. OIL		c. SOLVENTS		d. CHEMICALS		e. SOLIDS		f. OTHER	
AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE
X X	(1) PAINT, PIGMENTS	X	(1) OILY WASTES	X	(1) HALOGENATED SOLVENTS	X	(1) ACIDS	X	(1) FLYASH	X	(1) LABORATORY PHARMACEUT.
	(2) METALS SLUDGES		(2) OTHER(specify):	X	(2) NON-HALOGNTD. SOLVENTS		(2) PICKLING LIQUORS		(2) ASBESTOS		(2) HOSPITAL
	(3) POTW				(3) OTHER(specify):		(3) CAUSTICS		(3) MILLING/ MINE TAILINGS		(3) RADIOACTIVE
	(4) ALUMINUM SLUDGE						(4) PESTICIDES		(4) FERROUS SMLTG. WASTES		(4) MUNICIPAL
	(5) OTHER(specify):						(5) DYES/INKS		(5) NON-FERROUS SMLTG. WASTES		(5) OTHER(specify):
							(6) CYANIDE		(6) OTHER(specify):		
							(7) PHENOLS				
							(8) HALOGENS				
							(9) PCB				
							(10) METALS				
							(11) OTHER(specify)				

Continued From Page 2

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (place in descending order of hazard).

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (specify):				

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

- ☐ 1. NPDES PERMIT ☐ 2. SPCC PLAN ☐ 3. STATE PERMIT (specify): _____
☒ 4. AIR PERMITS ☐ 5. LOCAL PERMIT ☐ 6. RCRA TRANSPORTER
☐ 7. RCRA STORER ☐ 8. RCRA TREATER ☐ 9. RCRA DISPOSER
☐ 10. OTHER (specify): _____

B. IN COMPLIANCE?

- ☐ 1. YES ☐ 2. NO ☐ 3. UNKNOWN

4. WITH RESPECT TO (list regulation name & number): _____

VIII. PAST REGULATORY ACTIONS

- ☒ A. NONE ☐ B. YES (summarize below)

IX. INSPECTION ACTIVITY (past or on-going)

- ☐ A. NONE ☒ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION
routine generator inspections			

X. REMEDIAL ACTIVITY (past or on-going)

- ☒ A. NONE ☐ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.

This facility did not need to notify.



Notification of Hazardous Waste Site

United States
Environmental Protection
Agency
Washington, DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

810608

KY5 000001085

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name _____
Street _____
City _____ State _____ Zip Code _____

B Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site Simmons Casket Co. Div. G+W Casket Corp.
Street Route 3 DEF KY 39
City Lancaster County Garrard State Ky. Zip Code 40444

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title) Madden, Frank B.
Phone (606) 792-2101

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year) 1965 To (Year) Present

E Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:

Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

- 1. ☐ Organics
- 2. ☐ Inorganics
- 3. ☒ Solvents
- 4. ☐ Pesticides
- 5. ☐ Heavy metals
- 6. ☐ Acids
- 7. ☐ Bases
- 8. ☐ PCBs
- 9. ☐ Mixed Municipal Waste
- 10. ☐ Unknown
- 11. ☐ Other (Specify) _____

Source of Waste:

Place an X in the appropriate boxes.

- 1. ☐ Mining
- 2. ☐ Construction
- 3. ☐ Textiles
- 4. ☐ Fertilizer
- 5. ☐ Paper/Printing
- 6. ☐ Leather Tanning
- 7. ☐ Iron/Steel Foundry
- 8. ☐ Chemical, General
- 9. ☐ Plating/Polishing
- 10. ☐ Military/Ammunition
- 11. ☐ Electrical Conductors
- 12. ☐ Transformers
- 13. ☐ Utility Companies
- 14. ☐ Sanitary/Refuse
- 15. ☐ Photofinish
- 16. ☐ Lab/Hospital
- 17. ☐ Unknown
- 18. ☒ Other (Specify) Paint Operation

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:

EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

F003	F018	
F005		

Above - Hazardous waste from non specific sources 261.31

Notification of Hazardous Waste Site

Side Two

F Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☒ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet	Unknown
gallons	5000 Maximum
Total Facility Area	
square feet	2750'
acres	.09

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☒ None

Note: Items Hand I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

SEE ATTACHED:

- A. Topographical Map
- B. Aerial Photo copy - Plant Site
- C. Photo copy Drum "Waste" storage area
- D. Drawing of Plant Site
- E & F Copies of aerial photos

I Description of Site: (Optional)

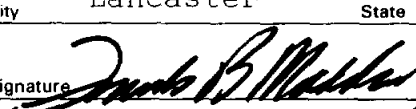
Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

Paint thinner waste - stored in 55 gal. drums - pumped into tank trucks once or twice per year - transported to a recycling facility to reclaim the solvents.

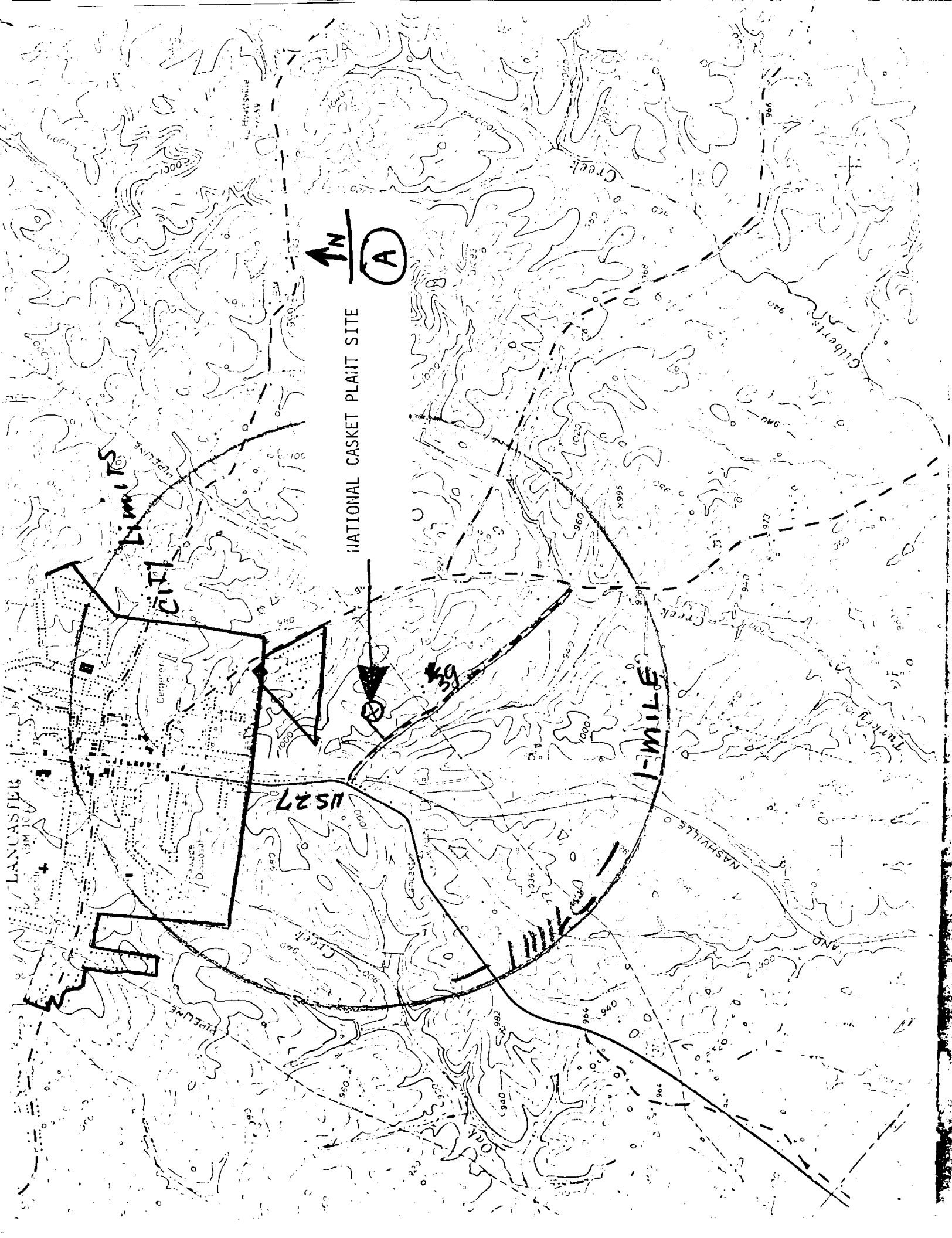
Paint Sludge F018 - rendered neutral and transported to City owned land fill
040.06 Est. 2000 Gals.per year

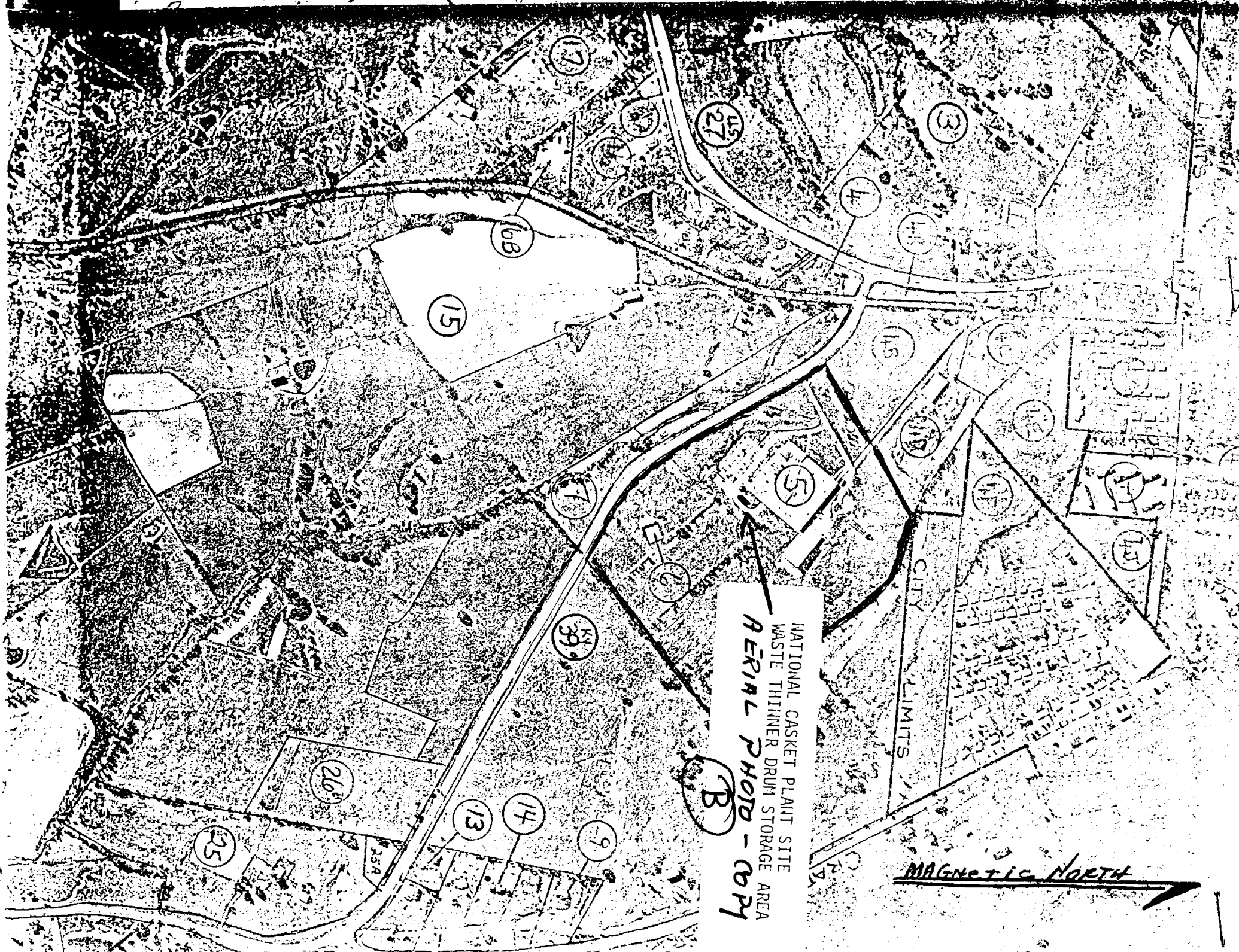
J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other".

Name Frank B. Madden, Jr.
Street P.O. Box 42 Industrial Rd.
City Lancaster State Ky Zip Code 40444
Signature  Date 8/7/89

- ☐ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☒ Other





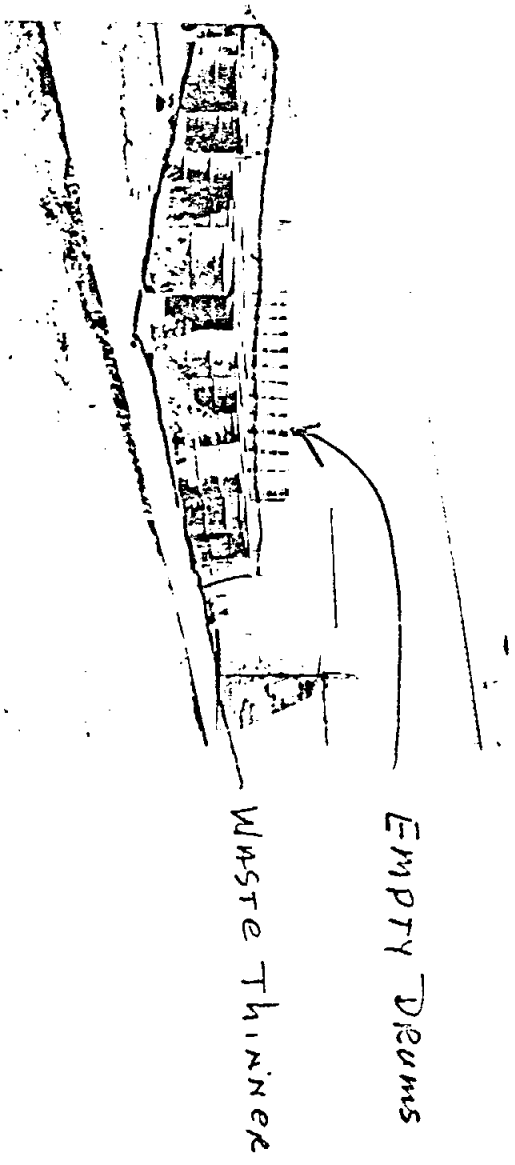
NATIONAL CASSET PLANT SITE
WASTE THINNER DRUM STORAGE AREA
AERIAL PHOTO - COPY

B

MAGNETIC NORTH

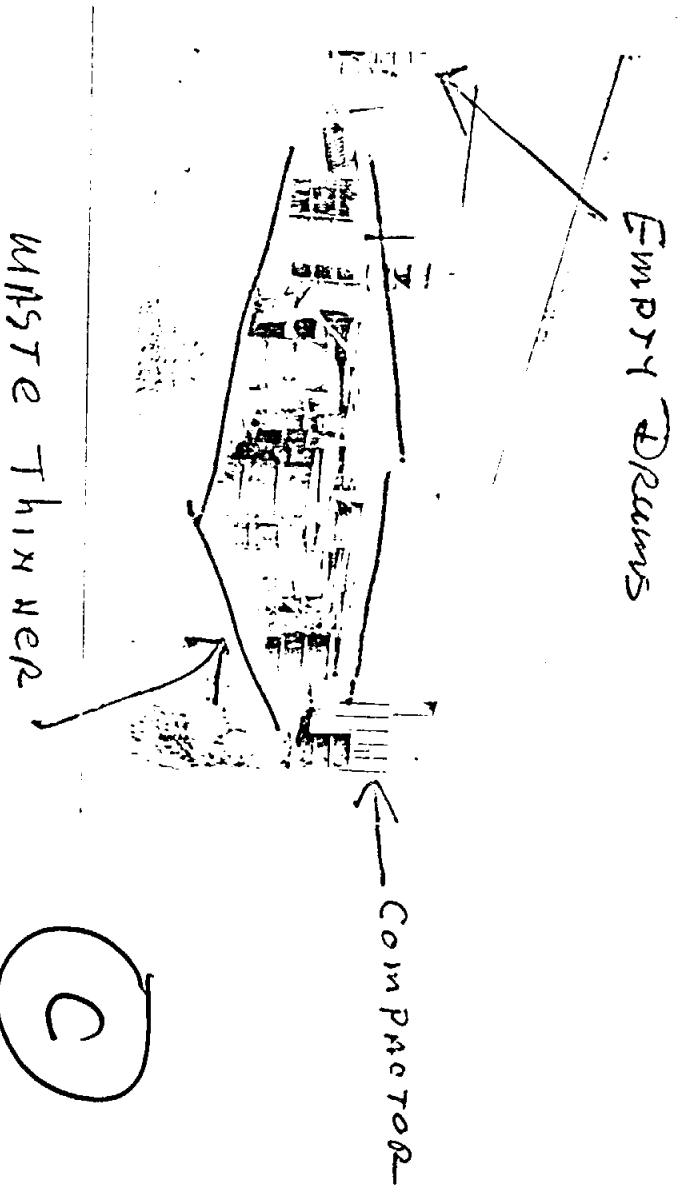
CITY LIMITS

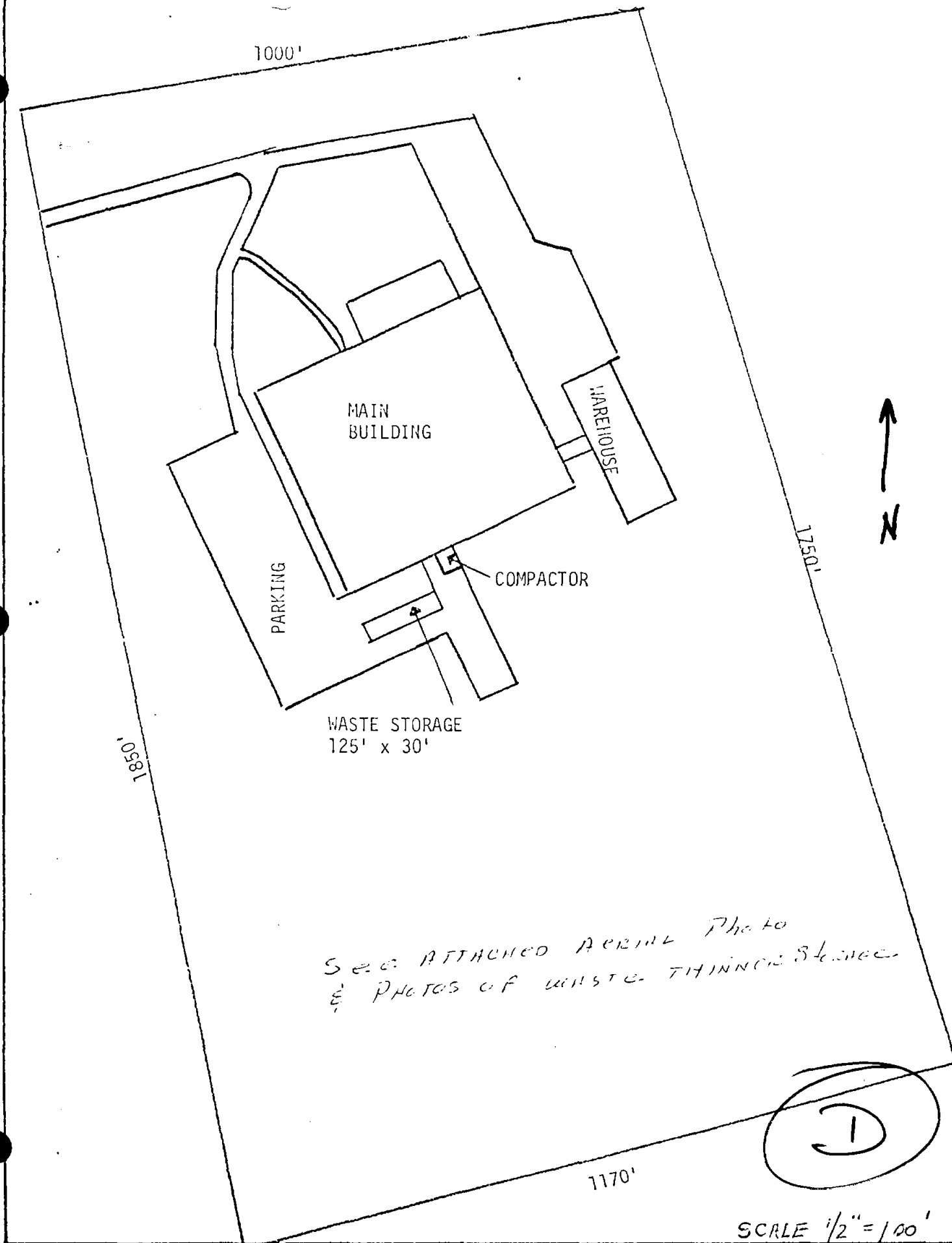
National Cast Co - 10-14-80
hannover, Kentucky
Waste Thinner Storage

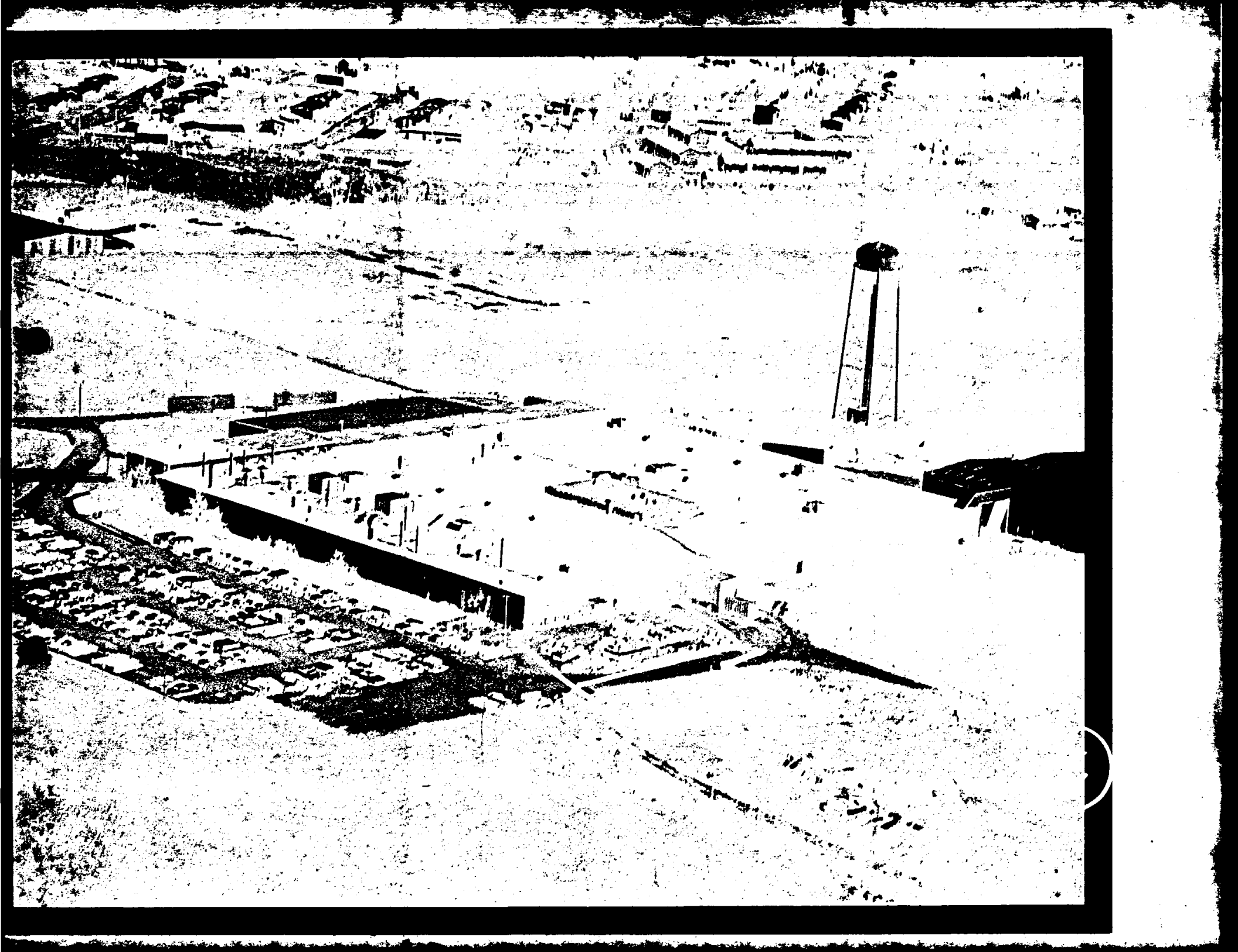


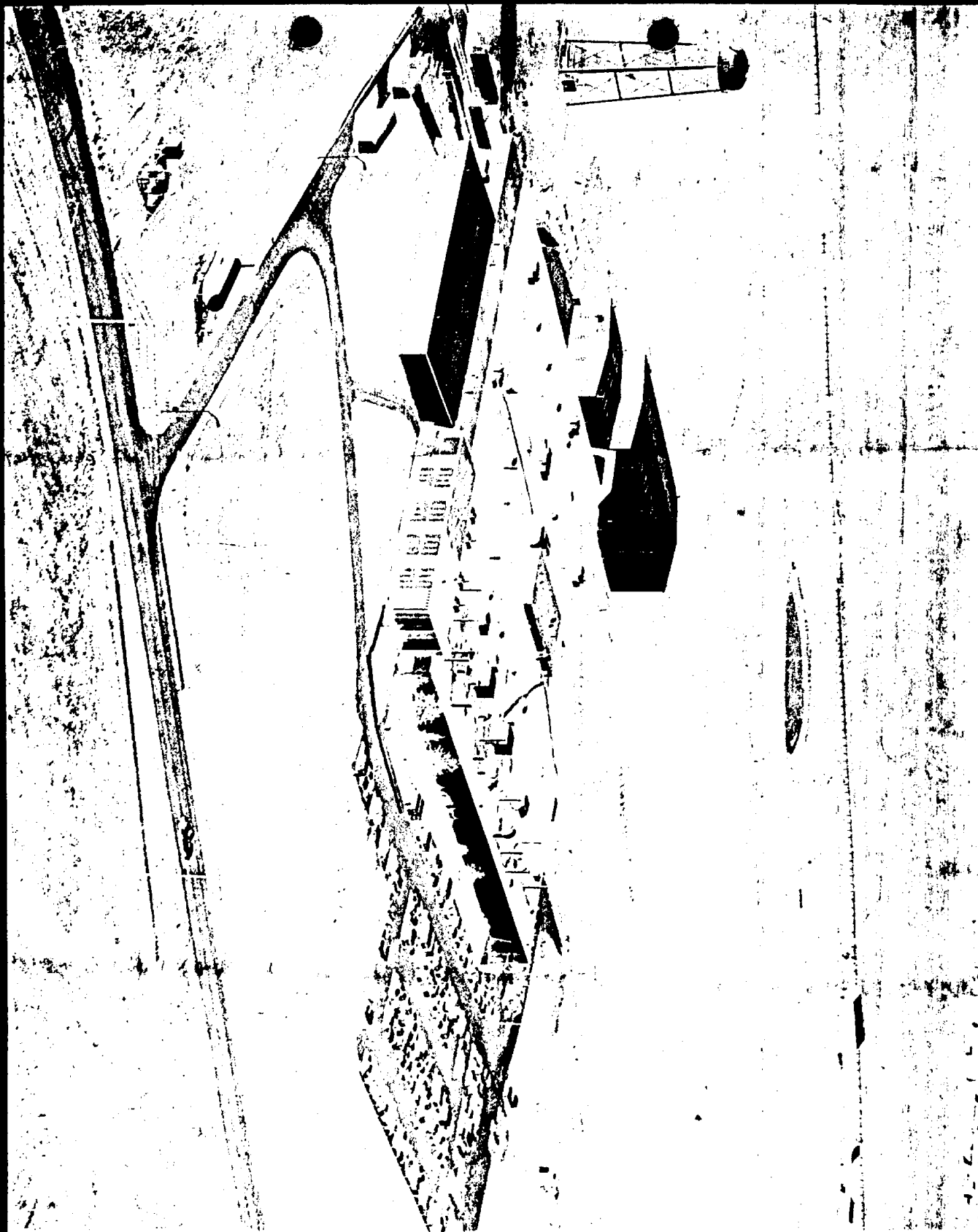
South to North

West to East









SITE ASSESSMENT DECISION - EPA REGION IV

Site Name: Simmons Casket Company EPA ID#: KYD050074889
 Alias Site Names: _____
 City: LANCASTER County or Parish: GARRARD State: KY
 Refer to Report Dated: PA: _____ SI: 10/30/92 Other (report type & date): _____
 Report developed by: B&U WASTE SCI

DECISION:

- ☒ 1. Further Action under Superfund (CERCLA) is not appropriate or required because:
- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> 1a. Site Evaluation Accomplished (SEA). | <input type="checkbox"/> 1 b. Action Deferred to: | <input type="checkbox"/> RCRA
<input type="checkbox"/> NRC |
|---|---|---|
- ☐ 2. Further Investigation Needed Under Superfund:
- | | | |
|---------------|---------------------------------|--------------------------------|
| 2a. Priority: | <input type="checkbox"/> Higher | <input type="checkbox"/> Lower |
|---------------|---------------------------------|--------------------------------|
- | | | | |
|--------------------|--|--|---------------------------------------|
| 2b. Activity Type: | <input type="checkbox"/> PA
<input type="checkbox"/> SI | <input type="checkbox"/> ESI
evaluate HRS score | <input type="checkbox"/> Other: _____ |
|--------------------|--|--|---------------------------------------|

DISCUSSION/RATIONALE: SITE SEA DUE TO LOW SCORE ON
8/28/92. MINOR REVISIONS COMPLETE 11/4/92.

Report Reviewed and Approved by: LOFTEN CARR Signature: [Signature] Date: 1/25/93
 Site Decision Made by: LOFTEN CARR Signature: [Signature] Date: 1/25/93
ON 8/28/93

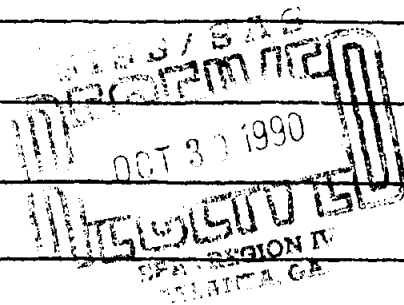
01A.

5
FACILITY NAME: Simmons Casket Company

LOCATION: Lancaster, Kentucky

EPA Region: IV Date 3/16/92

Person(s) in charge of the facility: Lyn Osborn



Name of Reviewer: C. Craycraft

Date: _____

General description of the facility:

(For example: landfill, surface impoundment, pits, containers; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Site formerly produced caskets. The site has been remodelled and now produces abrasive wheels.

Potential contaminants include paint sludge, lacquers, and solvents such as 1,1,1-trichloroethane.

Scores: $S_M = 37.25$ $S_{gw} = 59.0$ $S_{sw} = 0$ $S_o = N/A$

$S_{FE} = N/A$

$S_{OC} = 37.5$

* Denotes observed release score

IIRS COVER SHEET

Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Rel. (Section)
1 Observed Release	0 45	1	0 45	45	3.1

If observed release is given a score of 45, proceed to line 4.
If observed release is given a score of 0, proceed to line 2.

2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 3	2	4	8	
Net Precipitation 11"	0 1 2 3	1	2	3	
Permeability of the Unsaturated Zone <i>silt loam</i>	0 1 2 3	1	1	3	
Physical State <i>unknown</i>	0 1 2 3	1	3	3	

Total Route Characteristics Score

10

15

3 Containment <i>unknown</i>	0 1 2 3	1	3	3	3.3
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4 Waste Characteristics					3.4
Toxicity/Persistence <i>unknown</i>	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity <i>unknown</i>	0 1 2 3 4 5 6 7 8	1	8	8	

Total Waste Characteristics Score

26

28

5 Targets					3.5
Ground Water Use	0 1 2 3	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	20	40	

Total Targets Score

29

49

6 If line 1 is 45, multiply 1 x 2 x 5	NOR	22620	
If line 1 is 0, multiply 2 x 3 x 4 x 5	OR	33930	57.330

7 Divide line 6 by 57.330 and multiply by 100
NOR = NO Observed Release; OR = Observed Release
 $S_{gw} = \frac{39.5 \text{ NOR}}{54.2 \text{ OR}}$

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	<u>0</u> 45	45	4.1
If observed release is given a value of 45, proceed to line 4 . If observed release is given a value of 0, proceed to line 2 .					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	<u>0</u> 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall <i>2.75</i>	0 1 <u>2</u> 3	1	2	3	
Distance to Nearest Surface Water <i>2500'</i>	0 1 2 <u>3</u>	2	6	6	
Physical State <i>unknown</i>	0 1 2 <u>3</u>	1	3	3	
Total Route Characteristics Score			11	15	
3 Containment <i>unknown</i>	0 1 2 <u>3</u>	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 <u>18</u>	1	18	18	
Hazardous Waste <i>unknown</i> Quantity	0 1 2 3 4 5 6 7 <u>8</u>	1	8	8	
Total Waste Characteristics Score			26	26	
5 Targets <i>downstream surface water is not used within 3 miles</i>					4.5
Surface Water Use	<u>0</u> 1 2 3	3	0	9	
Distance to a Sensitive Environment <i>> 1 mile</i>	<u>0</u> 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	<u>0</u> 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			0	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5		NOR OR	<u>0</u> 0	64,350	
7 Divide line 6 by 64,350 and multiply by 100			<u>0</u> 0	NOR OR	

NOT SCORED

Fire and Explosion Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Total Targets Score				24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 4 by 1,440 and multiply by 100			SFE =		

	s	s ²
Groundwater Route Score (S _{gw})	39.5	1560.25
	59.2	3504.64
Surface Water Route Score (S _{sw})	0	0
	0	0
Air Route Score (S _a)	NOT	SCORED
$S_{gw}^2 + S_{sw}^2 + S_a^2$		1560.25
		3504.64
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		39.50
		59.20
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		22.83
		34.22

WORKSHEET FOR COMPUTING S_M

Direct Contact Work Sheet

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Rel. Section
---------------	--------------------------------	-----------------	-------	---------------	-----------------

[1] Observed Incident	0 45	1	<u>0</u> 45	45	8.1
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If line **[1]** is 45, proceed to line **[4]**

If line **[1]** is 0, proceed to line **[2]**

[2] Accessibility	0 1 2 <u>3</u>	1	3	3	8.2
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[3] Containment <i>unknown</i>	0 <u>15</u>	1	15	15	8.3
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[4] Waste Characteristics Toxicity <i>unknown</i>	0 1 2 <u>3</u>	5	15	15	8.4
---	--------------------	---	----	----	-----

[5] Targets					8.5
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Population Within a 1-Mile Radius	0 1 2 <u>3</u> 4 5	4	12	20	
--------------------------------------	--------------------------	---	----	----	--

Distance to a Critical Habitat <i>> 1 mile</i>	<u>0</u> 1 2 3	4	0	12	
--	--------------------	---	---	----	--

Total Targets Score	12	32
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[6] If line [1] is 45, multiply [1] x [4] x [5]	NCR	8100	
If line [1] is 0, multiply [2] x [3] x [4] x [5]	OR	8100	21,600

[7] Divide line [6] by 21,600 and multiply by 100	SOC = $\frac{37.5}{37.5}$	NCR OR
---	---------------------------	-----------



Susan

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

SEP 29 1993

Mr. Jeff Pratt, Manager
Superfund Branch
Kentucky Natural Resources and
Environmental Protection Cabinet
Frankfort Office Park
14 Reilly Road
Frankfort, Kentucky 40601

RE: Simmons Casket Site, Lancaster, KY

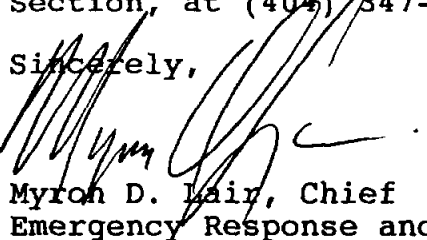
Dear Mr. Pratt:

On July 1, 1993, the U.S. Environmental Protection Agency's Emergency Response and Removal Branch (ERRB) conducted a site investigation for potential removal action eligibility under the National Contingency Plan (NCP) at the above mentioned site. Results from the investigation were evaluated using criteria from Section 300.415 of the NCP and current ERRB program guidance.

Our review of analytical data for soil samples collected at this by the EPA On-Scene Coordinator (OSC) indicates the presence of phenol at concentrations up to 22 parts per million (ppm), as well as elevated levels of phthalates and other semi-volatile compounds. While this site is removal eligible based upon NCP criteria, ERRB has determined that the site does not pose an immediate threat and has been assigned a low priority for action. Given our current workload, ERRB does not anticipate taking any further action at this site. If conditions change or additional information becomes available, ERRB will re-evaluate the site as necessary.

Should you have any questions concerning ERRB's determination, please contact Mr. Shane Hitchcock, Chief of Removal Operations Section, at (404) 347-3931.

Sincerely,



Myron D. Blair, Chief
Emergency Response and Removal Branch

cc: Narindar Kumar, Site Assessment Section, EPA

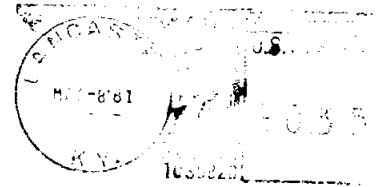


Simmons Casket Company

A Division of Gulf+Western Casket Corporation

P.O. BOX 42
INDUSTRY ROAD
LANCASTER, KENTUCKY 40444

EPA Region 4
RCRA Activities
345 Courtland N.E.
Atlanta, Ga. 30308



TO FILE:
KYD050074 829

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV, ATHENS, GEORGIA

Key

MEMORANDUM

FEB 24 1992

WPB/SAS

FEB 25 1992

SUBJECT: ESD Document Review: Field Study Plan, Site Inspection,
Simmons Casket Company,
Lancaster, Garrard County, Kentucky
ESD Project No. 92E-268

RECEIVED
FEB 25 1992
EPA - REGION IV
ATLANTA, GA

FROM: Bruce Ferguson BCF
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

TO: Al Hanke, Chief
Site Assessment Section
Waste Program Branch
Waste Management Division

THRU: William R. Bokey, Chief
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

The proposed site inspection plan prepared by Black and Veach waste Science Technology Corp has been reviewed by ESD personnel and the sampling activities outlined in the subject document appear to be commensurate with those of ESD and are acceptable. The following comments are offered.

- Section 2.1 Surface Soil Sampling is not included in the Table of Contents.
- The subsurface soil sample collected in the vicinity of the former storage tanks should be taken at a depth which would be below the bottom level of the tanks.

If there are any questions or comments regarding this review, please call me at FTS 250-3628.

cc: Bokey/Hall
C. Helm

JAN 30 1992

4WD-WPB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Lynn Osborne
Allison Abrasives
163 Industry Road
Lancaster, Kentucky 40444

RE: Simmons Casket Company
Lancaster, Garrard County, Kentucky
KYD050074889

Dear Mr. Osborne:

The United States Environmental Protection Agency (EPA), pursuant to the authority and requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42, U.S.C. 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act (SARA), Public Law 99-499, is planning to conduct an investigation of the above-referenced site. Simmons Casket Company is located in Lancaster, Garrard County, Kentucky. EPA has reason to believe that there may be a release or threat of a release of hazardous substances from the site into the surrounding environment. The purpose of the investigation is to determine the nature and extent of contamination at the site and to determine what, if any, further response action would be appropriate.

As per your telephone conversation with me on January 28, 1992, EPA was granted permission for access to your property beginning on or about February 17, 1992, and continuing through the completion of the investigation on or about February 21, 1992. Activities to be conducted during the investigation may include:

1. Inspect, sketch, and photograph the premises;
2. Collect surface and subsurface soil samples;
3. Collect groundwater and subsurface water samples;
4. Collect sediment samples;
5. Conduct air monitoring;
6. Transportation of equipment onto and about the site as necessary to accomplish the activities above, including trucks and sampling equipment.

-2-

The above sampling activity will be conducted by personnel from EPA Region IV's Field Investigation Team (FIT). Mr. Carter Helm of FIT will contact you prior to the actual site visit to make final arrangements and note any changes.

Split samples will be made available if requested. However, you will be required to furnish your own containers as well as your own laboratory analyses.

If you have any questions, please contact me at (404) 347-5065. Your cooperation in this matter is appreciated.

Sincerely,

Loften Carr
Environmental Scientist

cc: Carl Millanti, KYDEP
Carter Helm, B & V

LC:m:01/28/92x5065 Disk: Carr Doc: alison.acc

CARR DEIHL

1/28/92 *1-29-92*

ACCESS INFORMATION SHEET

Site Name: Simmons Casket Co. FIT Project Manager: Hubert Wieland
 Site Address: P.O. Box 42 FIT State Coordinator: Carter Helm
Industry Road EPA Contact: Lofter Carr
Lancaster, Garrard Co., KY Field Date: 2/17/92
 EPA ID #: KYD 050074889 TDD Number: 52011.020

	File Information	Verification
Facility Owner/Operator Address Phone No. Principal Contact	York Casket Co. P.O. Box 42 Lancaster, KY 40444 (606) - 792-2101	Allison Abrasives (606) - 792-3033 163 Industry Rd Lancaster, KY 40444 ATTN: LYNN OSBORNE
Landowner Address Phone No. Principal Contact (If different from above)	Simmons Universal 372 Washington St. Wellesley Hills, MA 02181	W.P.B./S.A.S. RECEIVED JAN 23 1992 EPA - REGION IV ATLANTA, GA
Date of Information	1984	1989

Date Access Required 2/17/92 Date Information Submitted to EPA 1-22-92
 (3 weeks prior to field date) DATE CALLED 1/28/92 CALLER: Lofter Carr
ACCESS GRANTED per LYNN OSBORNE of Allison Abrasives

AUTHORITY TO MANAGE IDW

Comments:

EPA views IDW management as an inherent part of ROD (e) (4). Should a site owner refuse to provide or seek a court order, to gain site access for environmental monitoring, EPA may result in imposing the sanctions authorized under RCRA.

EPA believes the approach contained in this guidance is appropriate for the limited scope and purpose of particular site (other than to gather information at unchanged (e.g., returning soil cuttings to the local SM should seek to obtain the appropriate management site access agreements).



CARTER J. HELM

1117 Perimeter Center West
 Suite W-212
 Atlanta, Georgia 30338
 (404) 392-9227

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COWLEY STREET, N.E.
ATLANTA, GEORGIA 30303

MAR 25 1992

END-VPB

Mohammad Mchammadi, Ph.D.
GeoSciences, Inc.
P.O. Box 40185
Baton Rouge, Louisiana 70835

RE: 4-RIN-0815-92
Simmons Casket Company
Lancaster, Kentucky
KY205007-138

Dear Dr. Mohammadi:

This is in response to your recent visit to U.S. EPA Region IV on March 16, 1992, at 8:30am. to review the above referenced files pursuant to your Freedom of Information Act (FOIA) request.

Please find enclosed the bill for the material you copied during your visit. Fees for compiling the information total \$28.75. Copies of the "Bill for Collection" and "Notice of Fee Schedule and Payment Procedures" are enclosed. Please remit payment in that amount within 30 days of the date of this response to the following address.

U. S. Environmental Protection Agency
P. O. Box 100142
Atlanta, Georgia 30384
RE: 4-RIN-0815-92

To ensure proper credit, your check should reference the above RIN number. Your prompt remittance of the amount indicated will be appreciated.

Parts of the file information were withheld, because they are predecisional and are exempted from disclosure by FOIA Exemption 5. See 5 U.S.C. Section 552(b)(5) and 40 C.F.R. Part 2.118(a)(5). Enclosed is an index of the withheld information, classified by exemption.

-2-

Should you wish to appeal this partial denial, you must submit a written appeal to the following address within 30 days of your receipt of this letter.

Freedom of Information Officer (A-101)
United States Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460
4-RIN-0815-92

Your appeal should reference the above RIN number, the date of this determination, my name, title and address.

Should you have any questions regarding the withheld information, please contact Ms. Lou Ann Gross in the Office of Regional Counsel at (404) 347-2641, extension 2282.

Sincerely yours,

/s/ RICHARD D. GREEN
ACTING

Donald J. Guinyard
Director
Waste Management Division

Enclosure

LC:m:03/18/92x5065 Disk: Carr Doc: ⁰⁸¹⁵~~0784~~

CARR DEIHL HANKE LUCIUS GROSS JONES GREEN GUINYARD

He
3/17/92
SA
3/19
MT
3/20

INDEX OF WITHHELD DOCUMENTS
RE: 4-RIN-0815-92

<u>Description of Withheld Documents</u>	<u>Exemption</u>
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Simmons Casket Company (KYD050074889)	
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Preliminary Hazard Ranking System, HRS score and scoring documentation	
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